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on 13 March, 2020

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From DEPU[redacted]
SUPERINTEND[redacted]

I HAVE the honor to ac[redacted]
October 1887, to the Secretary [redacted]
on Bagrián which occurred on the [redacted]
are awaiting a further communication from th[redacted]

2. I am not sure on what matter a further rep[redacted] the point noted in yours of 12th September, as to the value of the property injured and mischief done.

To dispose of this first, I would refer you to Mr. Thorburn's letter of 12th July to Punjab, in which he stated that the raiders killed eleven buffaloes, and that two British subjects were shot during the pursuit.

The value of the cattle, big and small, may be put down at Rs. 400, and blood-money for lives lost Rs. 600, though in any settlement with the tribes concerned they would probably, in accordance with the Afghán custom, claim a set-off for men killed on their side, regardless of the fact that the offenders are responsible for the bloodshed in the defence and pursuit.

3. From the tenor of your letter to the Secretary to Government, Punjab, and your endorsement of 19th October 1887 to me, forwarding correspondence about the Rs. 20 monthly allowed for the education of Amín Khán, I gather that you expect a further report as to Abdulla Khán's share in the raid of 11th July. I propose, therefore, to offer the following remarks, dividing them for convenience sake into four heads:—

1st. On the question of responsibility for the raid.
2nd. On the action and responsibility of the Khán of Agror.
3rd. On the usefulness of keeping and educating Amín Khán (Abdulla Khán's son).
4th. On the means suggested for effecting a settlement of our claims with persons beyond the border.

4. In regard to the general question of the responsibility of this raid, nothing fresh has come to light since the date of Mr. Thorburn's report (dated 22nd September) written a few days before he left the district, and detailing fully the various ascertained or reported facts which led him to the conclusion that Abdulla Khán and his brothers instigated the raid and took an active part in it.

I am clearly not in so good a position as Mr. Thorburn to form a correct judgment on the matter. He was here when the raid took place and before; he made the enquiry and examined some of the persons concerned, and I am unable to disagree with his conclusions, in support of which he quotes facts and reports which I need not recapitulate.

With regard to your remark as to the trustworthiness of Rahmatulla Khán, Deputy Inspector of Oghi, I have noted it for guidance, but I would point out that he has hitherto been considered and was recorded by Mr. Fryer

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There was also evidence to show that men of Ghaffar Khán, chief of Trund, father-in-law of Abdulla Khán, were engaged in it, though ultimately Mr. Thorburn accepted Ghaffar Khán's denial.

Of the others, Mír Said, the leading man in Parári, is, as explained above, not only an ally of the Khán of Agror, but just now specially anxious to conciliate him, as he has long been betrothed to the Khán's sister, and is now seeking to get her in marriage, while the Khán has delayed making her over in order to press him to abandon the cause of Abdulla Khán.

6. If therefore Mr. Thorburn's conclusion, that Abdulla Khán was guilty, is incorrect, some other instigation must have been at work.

A raid like this was not got up simply for plunder, like the cases of driving off cattle at pasture on the hills near frontier passes such as occur constantly in other parts of our border. It must have had some irritating cause in the state of Agror politics and factions.

The question here occurs in this as in other "raids on Agror," who was injured? Was the property of the Khán or his tenants touched? The whole attack, whether by accident or design, fell on Sakhi Sháh, son of Pír Ali Sháh, who, like his father before him, is an enemy of the Khán, and only recently on account of the feud between them was allowed by the Deputy Commissioner to pay his revenue demand, not to the Khán, but directly into the Treasury.

Again, it must be remarked that the Khán's armed men, to maintain whom he has only recently received a large grant from the Government, were not on the spot till after the fight was over. I am far from saying that the Khán either instigated or even permitted this raid. What I wish to bring out is that, if you do not accept the position that Abdulla Khán brought it about, it would appear to me that suspicion must attach to the Khán himself; and I question whether, if an account were made of the result of the raids on this border in the past eight years, it would not be found that the Khán's enemies in British territory have suffered as much loss in life and property as the Khán's tenants and dependents, and one cannot help recurring to the midnight attack on Kulakka some few years ago, when the nearest male relations of Abdulla Khán, the outlaw, were killed in British territory by a party known to have been sent by Háshim Ali Khán, Khán Khel Hassanzai, the brother-in-law of the Khán of Agror.

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It is difficult, if not frequently impossible, to sift [redacted] conflicting reports and statements about a raid, or to see through the crooked designs and selfish motives for an offence done by the hands of others, but not unfrequently perhaps planned by brains within our border, and it is nearly always hopeless to secure such evidence against individuals as would convince a person merely reading the record. In the tangled coil of Agror politics there is one rough standard which in my opinion it would often be safe and well to adopt,—to measure service by success, and endeavours by results. If the Khán were straightly told by higher authorities than the Deputy Commissioner that, putting aside large coalitions of tribes not under his control, he would in future be judged by the event; that when, as in the present case of Bagrián, 11th July, servants and tenants of his ally and partizan are found to raid on British territory and to rob and injure only an enemy of the Kháu; when, too, his own armed "company," to maintain whom Government have lately remitted to him half the revenue of the valley, arrive on the spot too late to do more than condole with our villagers on their killed and wounded: if, I say, the Khán were plainly told that in such a case, without regard to the conflict of doubtful evidence and lying reports, he would himself be called on to pay the damage; that whatever else was obscure, whenever the event showed him to have been remiss he would be held responsible: if this were done, and in a way to make him realize it, I believe petty raids of this kind would greatly diminish. It must be remembered, too, that the cause of all these troubles is of the Khán's own making. It is he who drove out Abdulla Khán from the lands which his father assigned and gave to Abdulla's father for his maintenance; it is he who has quarrelled with all his own brothers without exception, and had not the Deputy Commissioner compelled him to allot lands to them, they too would probably have followed Abdulla's example with the sympathy of the whole country on their side.

8. I come now to the third question as to the profit or propriety of spending money on keeping and educating Abdulla's son, Amín Khán. I am bound to say that I think with Mr. Thorburn that the detention of the boy here is no check whatever on the father.

First.—If his son were a hostage in the hands of an Amír of Kabul or of any lesser Afghán chief, Abdulla Khán might, perhaps, think twice before he offended again, lest his son should lose his head for the first man shot in a raid. But he knows perfectly well that the British Government will do nothing of the kind; he knows his boy is well cared for, is considered an

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said, his being in the school in Abbott-abad is no
check on the father), it seems to me that there is a risk of being misunderstood and of encouraging Abdulla and his sympathisers to think or hope that Government will listen to intercession on behalf of the rest of the family.

9. In connection with this I would invite attention to my reports noted in the margin when there was some talk of a jirga of the Chigharzai coming to Abbott-abad. The situation is much the same as it was then, and the Chigharzai show no intention of abandoning their client; indeed, he is now supported by voluntary subscription of 5 seers of grain from house to house.

Dated 18th January, 1st February, and 10th March 1887.

There is no doubt that not merely as an outlaw, but on the merits of his dispute with the Khán of Agror, he has the sympathies of all beyond the border and of most on this side of it. Our law courts upheld the Khán as landlord when he beggared Abdulla by ousting him from the villages which Atta Muhammad Khán had given to his guardian and friend Allahdád Khán, but the feeling of the neighbourhood was certainly that Abdulla had been hardly dealt with, and when finding *summum jus* to be *summa injuria* he went across the border, he carried with him much sympathy. While the last orders of Government are maintained he will remain a continual cause of unrest and trouble on the Agror frontier, and it is for this reason that I have enlarged on the Khán's position and duties, as our only hope of keeping Abdulla quiet is that Ali Gouhar Khán should see his responsibility and act up to it. Personally I am not sure it would not be wisest in the end to seek some middle way, and if it be possible without loss of dignity to permit Abdulla's or his family's return on conditions which he could accept. It is true that he has abetted and led raids in which robbery, arson, and even murder have been committed; but so long as he remains in outlawry there will be little certainty of quiet or peace on this border. On the other hand, the present position of Government is perfectly intelligible, that until he submits unconditionally no mercy will be shown to him, or intercession listened to; but it seems to me that the maintenance of Abdulla's son is not in accord with that position, and is likely to prevent its being realised or understood by Abdulla and his sympathisers.

10. The last question which remains is how to secure reparation from the Sayads of Parári and Rahím Khán of Chirmang. I find that orders were issued for the seizure of any property belonging to them or their tenants found in British territory, but by some mistake none were given for the arrest

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From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 10th November 1887.

WITH reference to your letter of the 3rd November, I request that you will see the Khán of Agror personally and explain to him the views expressed in your letter under acknowledgment, so far as they concern him, and see what he has to say in reply.

The tone I should wish you to adopt with him is that there are certain matters which we find it difficult to understand, and which until explained give rise to doubts as to whether he is managing the affairs of his valley and border as well as he might, and that we desire to consult and advise and direct him. I should like him very carefully examined, and I wish to receive your further opinion after this interview.

2. If the Khán feels your kindly sympathy with his difficulties and your recognition of the manner in which he has already endeavoured to manage the valley, he will, I have no doubt, speak without reserve. Should you find during your conversation that any suspicions you may entertain regarding him are strengthened, you had better put your views straight to him, and advise him plainly and unreservedly regarding his future line of action; then see what he says.

3. As between the Khán of Agror and Abdulla of Dilbori, we must remember the position of the fathers. The old Khán of Agror would tolerate no opposition, no rivalry, no insubordination amongst those in any way dependent upon him. Had Allahdád Khán, the father of Abdulla, endeavoured to maintain any other position than that of absolute dependence upon the Khán, the latter would not have allowed him to have remained a day in the valley, and Allahdád would never have received Dilbori for his maintenance. He was allowed no other position than that of a tenant-at-will, and the old Khán would have ejected him in a moment had Allahdád acted in any other manner. Allahdád sank his personality in the Khán.

4. But Abdulla of Dilbori has acted very differently. He set himself against the young Khán in every way, and rendered himself intolerable to the youth whose senior in age he was. Abdulla was the stronger character. He had done some little service and thought he would be supported by Government in Agror in independence of the Khán, and from the beginning

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Peshawar on the 25th November.

From F. D. CUNNINGHAM, Esquire, DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 19th November 1887.

IN reply to your letter of the 10th instant, I have the honour to state that before writing my letter of 3rd November about the raid on Bagrián I had requested the Khán of Agror to come and see me personally, or to send his agent, in connection with a criminal case which had arisen among the Khán's relatives, as I wished to talk over Agror matters generally with him. The Khán was very dilatory about coming, and finally sent his agent Fazl Ali, but not until after my report, which could no longer be delayed, was submitted, in compliance with your memos. of the 8th and 14th October, and I consider this of less importance, as the remarks called for related to a raid which occurred some months ago in connection with which Mr. Thorburn made full inquiries and submitted several reports.

Your letter under acknowledgment and No. 5215, dated 10th, were not received until the 14th instant, and as I had then made all preparations for going into camp before being present at the Pesháwar Darbár, and as I yesterday received orders by telegram to go straight to Pesháwar on special duty, it is impossible for me to discuss the matter with the Khán of Agror and report his views and statement before the Darbár. In writing to you in connection with the Darbár, I have already reported that the Khán desires to be excused from attending it on the ground that the state of affairs on the Agror border demands his presence at home, and this is perhaps more necessary now since the capture of Turrabáz, servant of Háshim Ali Khán, a man charged with many crimes in British territory whose arrest has greatly angered the Hassanzais.

2. Since my letter of the 3rd instant I have seen Fazl Ali, the Khán's agent, and have sent for and examined Sakhi Sháh: my views which were given in full in the letter quoted were, as there stated, based on Mr. Thorburn's reports and the record of his inquiries. In one matter, however, I find that a correction is necessary. Mr. Thorburn reported that eleven buffaloes had been slaughtered by the raiders, but now I find that though eight buffaloes, four cows and bullocks were seized, the raiders, finding they could

[redacted] of liability [redacted]

3. Sakhi S[redacted] as I have said, [redacted] about by Ali Gouhar himself. [redacted] I should say that I have no [redacted] beyond that he might do more th[redacted] expressing his annoyance and resentm[redacted] dacoit, and robber from beyond the bo[redacted] sufficient to prove it up to the hilt; at the[redacted] that a complete change cannot be expect[redacted] dubious intrigue to keep on terms with his[redacted] and to satisfy Government he is in a somew[redacted] siderable allowance must be made for him, as he[redacted] relation to Háshim Ali Khán, Hassanzai, a man[redacted] Government have already accounts to settle. I [redacted] report that I do not suspect the Khán of Agror of [redacted] endorse Mr. Thorburn's view that it was brought about [redacted] led by his brethren. You stated that you did not accept Mr. Thorburn's view as to Abdulla Khán's guilt, and it appeared to me that in that case some other instigation than that of Abdulla Khán must be looked for. I however have not the slightest intention of even suggesting a suspicion that the Khán is responsible for a raid which, as I have already said, appears to me to have been managed by his enemy Abdulla. Of the Khán I merely think that he was remiss in his arrangements for obtaining information and for being prepared to oppose attack.

4. The Khán's agent stated generally that he spent money freely in obtaining news, in distributing "lungís," and in breaking of coalitions worked by Abdulla Khán against the peace of Agror; that he had won over Miyan Said and Muhammad Ali Sháh of Bilandkot. Further, he denied that Miyan Said, the Khán's ally, had anything to do with this raid, and declared that the prime movers under Abdulla Khán's incitement were tenants and dependents of Ghaffar Khán of Tarund joined by men of Rahím Khán of Chirmang and of Gházi Sháh of Saidera. At this length of time it is hopeless, as I have already said, to attempt to enquire afresh as to the various degrees of responsibility of the Parári Sayads, Rahím Khán and Ghaffar Khán.

5. Fazl Ali, as you are doubtless aware, has great and, according to the unanimous report of all Hazára, complete influence over the Khán, whose affairs he manages with considerable ability and loyalty, at least to his master. What Fazl Ali says may be taken practically as the word of Ali Gouhar Khán, but on my return from Pesháwar, after completing a tour in the south of the district, I will, if you still desire it, see the Khán himself on the matter and report what he says.

From SECRETARY to GOVERNMENT, Punjab and its Dependencies, to COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated Lahore, 19th December 1887.

I AM directed to acknowledge the receipt of your letters marginally noted, forwarding further reports as to the raid upon Bagrián in the Hazára District, and discussing the complicity in the outrage of Abdullah Khán, formerly of Dilbori and now an outlaw.

Dated 12th September, 8th October, 12th and 30th November 1887.

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[redacted] t the Parári Sayads were concerned in the affair,
[redacted] dependents among the actual raiders being pre-
[redacted] event violence against Agror at a time when nego-
[redacted] ge were pending between them and the Khán.

4. On these grounds, and in the absence of cogent reasons which you may ascertain to the contrary, Mr. Lyall thinks that the raid must be held proved against Abdullah Khán and his brothers and their Chigarzai and Parári Sayad allies.

5. On the question whether the action so far taken is sufficient, His Honour observes that the lenient treatment adopted in the settlement of 1885 has failed. The Chigarzais, almost as soon as they were aware that Abdullah Khán and his family would obtain neither jágír from Government nor compensation from Agror until the former should surrender, sent to the Deputy Commissioner letters containing gross insults and threats. The raid now under notice appears to have been carried out in pursuance of those threats, and a more serious raid in greater force has apparently been averted only by the influence of the Khán of Agror with the Parári Sayads. Measures of retaliation have been confined to the incarceration of two Chigarzais who are detained in British territory as hostages with allowances for their maintenance, and to the announcement of a "baramta," or reprisals, against the Sayads of Parári and Rahím Khán of Chirmang, their property and dependents, as opportunity (which is not likely to last long) shall occur. At the same time the Khán of Agror has been forbidden to retaliate and the Agror villages have been directed to stand on the defensive.

6. This position is, in the Lieutenant-Governor's opinion, unsatisfactory and not quite consistent with the dignity of the British Government. A wanton attack, by way apparently of retaliating upon Government, has been made upon our people, property and lives have been lost, and a state of alarm has been engendered. As the Government does not permit its own subjects to retaliate by force, the question arises whether it does not under the circumstances incur an obligation to undertake retaliation on their behalf. I am to request that you will fully consider this matter and give the Lieutenant-Governor the benefit of your matured opinion.

7. The participation of Abdullah Khán and his brothers in the raid should, Mr. Lyall thinks, now be distinctly recognized, and the resolution of Government with regard to them marked by definite measures. This can best be done for the present through Abdullah Khán's son, Amín Khán, who was received as a hostage for his father and uncles, and who has proved useless for the purpose. Abdullah Khán has become hostile and abets armed raids upon our villages; to retain and educate his son in Abbott-abad at an expense of Rs. 20 per mensem is to encourage a repetition of outrages upon

the subjects of the Crown. Until Abdullah Khán surrenders, his hostili[redacted] must be met with hostility, and any false hopes or unfounded claims tha[redacted] may entertain and cherish must receive no encouragement. His Honour the Lieutenant-Governor accordingly directs that Amín Khán be sent to his father acro[redacted] the border under suitable escort, with a letter in which the views [redacted] expressed in this paragraph should be explained clearly to Abdu[redacted]án.

ENCLOSURE No. 3.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 26th January 1888.

IN continuation of my telegram of the 24th of January 1888, I am desired by the Lieutenant-Governor to forward the correspondence noted in the accompanying list on the subject of the raid which occurred on the night of the 9th instant on the hamlet of Odigraun near Ghanián in the Agror Valley.

2. The instructions for immediate action which have been communicated to the Commissioner are contained in my telegrams of the 22nd and 24th instant. The opinion which the Lieutenant-Governor has formed on the whole case is expressed in his note of the 23rd instant, which forms one of the enclosures to this letter. I am to ask for the instructions of the Government of India upon this note by Mr. Lyall.

3. I am to add that the Lieutenant-Governor has sent a copy of his note confidentially to the Commissioner for his and the Deputy Commissioner's information and with a view to their being ready to give their opinion and advice when the orders of the Government of India are received.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 12th November 1887.

I HAVE the honour to report that on the 6th instant the Deputy Inspector, Oghi, received news that a proclaimed offender named Turabáz, a Yaro Khel Hassanzai and servant of Háshim Ali Khán, Khán Khel, of Seri, had come to Sambalhat in British territory on business. The Deputy Inspector, taking some constables and some men from Belián, relatives of one Mansab, a Swati, whom Turabáz is charged with having murdered in 1880, went to the spot and arrested him.

A warrant was issued for the arrest of this Turabáz by a Magistrate (Qázi Mír Alam) in 1880, and he is also charged with other grave and heinous crimes in British territory, of which I annex a list. On being put before the Tahsíldár, who was on tour in Agror, he confessed to these offences.

2. I report the matter because this arrest, though it was the bounden duty of the Deputy Inspector to make it, and he deserves credit and praise for his promptitude, may lead to complications on the Agror Border. Turabáz is a confidential and trusted servant of Háshim Ali Khán, Khán Khel, of Seri, who, according to reports received to-day, is furious at his servant's capture and called his relatives and men together to consult how he could best avenge it. As a faction among the Akazai, the Painda Khel, led by Rashíd Khán and Azim Khán, sons of Zaríf Khán, are, as has been reported to you, moving to try and get up trouble on the Agror Border. Háshim Ali Khán may find the materials ready to collect sufficient men for a raid on Belián. The lands of that village run up a spur of the Black Mountain, not far from Háshim Ali Khán's own village Seri, and I have sent out express orders that no men, women, or children of Belián, or other neighbouring border village, are to go to cut wood or grass on the hills on the border without a sufficient "badragga" or escort of armed men, and I have warned the Thánadár to see that the villagers keep men under arms in their towers for protection at night.

3. The Khán of Agror has written to say that at this juncture the arrest of Turabáz is most unfortunate, as it will involve him with the Hassanzai, and probably lead to a coalition between Hassanzai and Akazai to attack some village on the border. In his letter he complains of the arrest of Turabáz, almost as bitterly as does Háshim Ali Khán himself in a note which he addressed to the Deputy Inspector of Police, a[illegible] which curiously illustrates the Khán's somewhat limited views of his r[illegible]ility, and of the duty of Government officials on his border. But [illegible] all circumstances his idea is, perhaps, not wholly unnatural, I ha[illegible]ten to him to explain that though it is unfortunate that anything [illegible] occur to bring about any trouble on his border, yet it is the bounden duty of the Police, as well as of himself, to arrest proclaimed offenders; and that, seeing the very grave crimes with which this Turabáz is charged, he cannot be released merely because his arrest may have displeased the Hassanzai Khán (who, by the way, is the brother-in-law of the Khán of Agror), but must stand his trial for the crimes which he is said to have committed in British territory. Among these, I may note, is the attack on Kulakka in 1883, in which a large band of armed men known to have been sent by Háshim Ali Khán made a midnight raid and murdered Samundar Khán, Muzaffar Khán, Núr Salám, and others, relatives of Abdulla Khán of Dilbori. In this case a heavy fine was imposed on Háshim Ali Khán, which has, so far, not been paid or recovered, and is outstanding against the Hassanzai. Háshim Ali Khán is doubtless furious that his servant has fallen into the hands of justice, but whether he takes any measures to avenge himself or not, it is a matter of congratulation that Turabáz should have been caught; so that if he be guilty, the border tribes may see that sooner or later those who commit such crimes in British territory meet with retribution.

Turabáz, proclaimed offender, and Háshim Ali Khán.

Deputy Inspector of Oghi reports:—On the 6th instant I heard through spies that Turabáz, Yaro Khel Hassanzai, servant of Háshim Ali Khán, of Seri, a man who is charged with several grave crimes, and against whom there are warrants out, had come to Sambalhat to gather makai. Sent Madad, Kachkol and Azád, brother of one Mansab whom this Turabáz murdered in 1880, to watch him, and went to the spot with eight constables. Found Turabáz at the "khirman" cleaning makai—Indian-corn—and arrested him.

He is charged with following offences:—

1. Murder—Section 302.

In case Crown *versus* Turabáz, murder of one Mansab, Swati.

Warrant for his arrest issued in March 1880. Charge Register No. 188 of March 1880.

2. Murder and dacoity—Sections 302-396, Indian Penal Code. No. 10 of 1883. Charge Register, Thána Oghi.

Crown *versus* Háshim Ali Khán, Turabáz, &c., murder of Muzaffar Khán, Samundar Khán, Salám Núr, Tora, in *Kulakka*, March 1883.

3. Theft—Section 379, Indian Penal Code.

Crown, by Háshim Ali of Belián *versus* Turabáz. Charge Register 33 of 5th September 1883, Oghi.

4. Kidnapping and robbery—Sections 366-392. Crown *versus* Turabáz. Charge Register 36 of 1886.

Deputy Inspector further reports:—

1. Háshim Ali Khán is openly, and the Khán of Agror secretly, vexed with me for making this arrest.

2. Encloses letter from Háshim Ali Khán, in which he accuses the Thánadár of breach of friendship in arresting Turabáz.

3. Hawás Mír, Mulla of Sambalhat, interfered and obstructed the arrest of Turabáz. He is sent up for trial under Section 225, Indian Penal Code.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, 17th November 1887.

THE arrest of Turabáz is very creditable to the Deputy Inspector of Police. The information that led to it should be handsomely rewarded, the names of the informers being kept secret.

2. Your arrangements appear to be all that can be desired. Police and Khán should pay well for all information to be acquired regarding the effect of this arrest Trans-Border. I do not myself think that Háshim Ali Khán will take action, but I consider that it would be better to warn him by letter that he will be held responsible for any move taken against British subjects and property. The Nawáb of Amb should be warned at once of possible complication, and you can somewhat increase Oghi garrison if you think it necessary, if possible at time of relief, and see that village defence, arms and ammunition are all in good order and sufficient. A copy of the Khán of Agror's letter to the Deputy Inspector of Police, and of your communication to the Khán thereupon, and of any reply the Khán may submit, should be forwarded to this office without delay.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, 16th December 1887.

IN continuation of this office No. 5371 of the 17th November, I forward copies of the following further correspondence as marginally noted. It is possible that Háshim Ali Khán may retaliate upon the Agror Border for the arrest of his follower Turabáz, but I do not anticipate any serious combination of tribes in support of him, and am inclined to think that he will fear to move, more especially because he already has an unrealized fine of Rs. 2,000 hanging over him.

Deputy Commissioner, Hazára's letter, dated 19th November.

Commissioner's letter, dated 16th December 1887.

I am sorry that the Deputy Commissioner of Hazára alluded, in his otherwise excellent reply, to the responsibility of Ali Gouhar Khán for the action of his relative Háshim Ali Khán. I am not of opinion that Government would hold the Khán in any way responsible for inimical action by the Hassanzai, and it would have been better to have told the Khán this.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 19th November 1887.

I HAVE the honour to acknowledge receipt of your letter of the 17th instant, regarding the arrest of Turabáz, a servant of Háshim Ali Khán, Khán Khel.

2. I have rewarded the villagers of Belián who gave the information and actively assisted in the capture; they were relatives of a man with whose murder Turabáz is charged, and have already voluntarily given evidence in Court in the cases which have so far been heard, so that their names cannot be kept secret. Moreover, they actually seized Turabáz and held him till the Police came up.

I recommend that a reward of Rs. 5 each be given to the eight constables who assisted in the capture, and a reward of Rs. 100 to the Deputy Inspector.

I may note that the whole circumstances of the capture formed the subject of judicial inquiry in a case which I had to hear under Section 30, Act X of 1882, and Section 225, Indian Penal Code, against a man of Sambalhat who interfered to obstruct the arrest.

3. I enclose as desired copies of—

(*a.*) Letter from Háshim Ali Khán to the Deputy Inspector of Police.

(*b.*) A letter from the Khán of Agror to me complaining of the action of the Deputy Inspector of Police.

(*c.*) Of my reply to the Khán.

4. Háshim Ali Khán will be addressed and the Nawáb of Amb will be warned in accordance with your instructions.

5. I have tried Turabáz for one of the offences with which he was charged, and have already sentenced him to seven years' imprisonment under Section 382, Indian Penal Code, and Section 30, Act X of 1882. The other cases are being enquired into, and, if evidence is procurable, he may be committed to the Sessions on charges of murder.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 16th December 1887.

WITH reference to your letter of the 19th ultimo, I refer you to the rules about cash rewards to the Police force requiring the sanction of Government; this should be prepared in due form in the Police Department.

2. As regards the letter from the Khán of Agror, I am glad to see that it is addressed to yourself and not to the Deputy Inspector of Police in Agror, as I had at first supposed. It is a very straightforward, simple declaration of his views, and erroneous though these may be, yet it is just the letter with which one feels inclined to sympathise. The Khán is evidently very anxious regarding the peace of his border and fears retalitory raids on the part of Háshim Ali Khán and his supporters.

3. Your reply to the Khán of Agror is in most respects good, but I should myself not have advised you to show that you would hold the Khán in any way responsible for the future conduct of Háshim Ali Khán, the head of the Hassanzai. I think the Khán requires all the encouragement and support we can give him, and I should have been satisfied with advising him to hold himself in readiness to resist Háshim Ali Khán and repel any attack.

It has been after years of patient guiding and management that we have succeeded in making the Khán of Agror trust to his own strength and the assistance of his retainers in the valley in keeping under control independent tribes upon his border, and it would be a most unfortunate thing if the Khán were to take alarm at the picture of his responsibility and endeavour to save his border from the attack of Háshim Ali Khán by appealing to their relationship, and to the damage to his own interests as Khán of Agror if his relative were to retaliate on British territory for the arrest of his follower Turabáz.

Some years ago the young Khán might have been seriously alarmed at the prospect of responsibility for the conduct of Trans-Border men being enforced against him, and he might have proceeded to deal politically with his independent neighbours, and perhaps to pay them for peace. I hope that now he may feel that he has only to keep straight, have no dealings with Háshim Ali Khán, but prepare to oppose him vigorously, to meet the approval of Government.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 16th December 1887.

WITH reference to your No. 650 of 22nd November 1884, sanctioning 200 rifles with ammunition for Agror, I have the honour to forward a copy of the Deputy Commissioner Hazára's letter of 10th instant, and its enclosure, reporting the perhaps urgent necessity for a further supply of rifles.

2. The reference has been delayed in the Deputy Commissioner's office; there was, however, no urgency at the time when Colonel Sym advocated this increase to the armament of the valley; now, however, the Deputy Commissioner thinks that it is possible there will be trouble on the border owing to the arrest of the outlaw Turabáz.

3. As it is thought urgent by the Deputy Commissioner, I have authorized the Deputy Commissioner to indent on the Ráwalpindi Arsenal at once for 300 Enfield rifles, with ammunition in proportion, under the sanction contained in the enclosure of your No. 552 of 22nd December 1885; and the Deputy Commissioner will distribute in the Agror Valley what may be advisable, in consultation probably with the Officer Commanding at Abbottabad, holding some in reserve.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 10th December 1887.

I HAVE the honour to enclose a copy of a letter from Colonel Sym, Commanding at Abbott-abad, dated 15th September 1887, suggesting that more Enfield rifles should be supplied to border villages in Agror. This letter appears to have been mislaid; it was not mentioned to me when I took charge of the district in the end of September; but, having lately heard that Colonel Sym had made a reference on the question, I made a search for the letter, and have had to get a duplicate copy. This is merely to explain the delay in addressing you in support of the recommendation made by Colonel Sym, and, though his suggestion was based on what may be called the normal state of the Agror Border, the proposal is still more desirable now in view of the attempt which Háshim Ali Khán, Khán of Seri, Khán of the Isazai, is making to excite the Khán Khel, Hassanzai, and others to commit an outrage on some border village in Agror in revenge for the arrest of his henchman Turabáz.

Two hundred Enfield rifles were supplied by Government in 1884 for Agror. Of these 100 were given to the Khán and are in the hands of his servants and tenants, 70 were distributed between the villages noted in the margin, and a small reserve was kept in the Thána at Oghi.

Bagrián:
Ghanián.
Jaskot.
Belián.

2. I recommend that 200, or if available 300, more long Enfield rifles be supplied, with 5,000 or 7,500 cartridges, or 25 rounds of ammunition per rifle. I am not aware whether such a request should be submitted on any particular form or indent, but as the gift will be all the more valuable if it can be made quickly, being out in camp in the district without means to comply with such forms, I venture to ask you to apply for sanction to this proposal and for the issue of the necessary orders on the nearest arsenal.

3. So far I have not asked the Officer Commanding at Abbott-abad to send out more troops to Oghi, being unwilling to move troops unless matters become more critical; but I expect it may be necessary soon to strengthen the post. Meanwhile, I have directed the District Superintendent to send additional Police there. If the rifles now asked for can be supplied soon, it may turn the scale and prevent a raid.

4. Information received shows that Háshim Ali Khán has sent his servants to the Hassanzai and Mada Khel, asking them to meet and consult what should be done to effect the release of Turabáz,—should they send in jirgas or make an attack on some Agror village? expressing his preference for the latter course. The Hassanzai named the 2nd December at Kila Maidan in presence of Maulvi Abdulla, leader of the fanatic Hindústánís, as the meeting-place for the jirgas, but the Mada Khel did not attend. The Hassanzai were somewhat lukewarm and put the Khán's emissaries off, saying that they would take up arms if the Mada Khels joined. Háshim Ali is meanwhile trying to move the Hassanzai by spending some money among them.

At present I doubt whether the body of the Hassanzai will fall in with Háshim Ali Khán's object, and the Mada Khels are not likely to consent. The Khán Khel, Háshim Ali's own section, are ready to act, and he may find allies among the Painda Khel Akazai, the sons of Zaríf Khán (of Shahtut notoriety) and their following. These latter are by those who perhaps know most of the history of Hazára border affairs, *e.g.*, Qázi Mír Alam, an experienced and very astute authority, said to be partizans of Ali Gauhar Khán of Agror. If the Khán of Agror works honestly, it is very possible or probable that nothing may come of his relative Háshim Ali Khán's projects, but he is very generally represented as sympathising rather with the friends of Turabáz in this matter than with our own villagers, the men of Belián.

5. Meanwhile, if the rifles asked for could be supplied soon, it would tend to prevent trouble; and with this view I have the honour to recommend that Government be asked to sanction their issue at once.

From COLONEL SYM, Commanding at Abbott-abad, to the DEPUTY COMMISSIONER, Hazára, dated 15th September 1887.

LIEUTENANT FAYRER, who recently returned from visiting the Oghi outpost, has reported to me that the villagers of Ghanián had asked him to endeavour to obtain for them a larger supply of Enfield rifles, as there were many men in the village who were armed with nothing better than the weapons of the country.

2. The experiment of issuing a certain number of rifles to the villagers of Agror has proved so successful, and the villagers are now so much more confident in their power to resist attack, that I would suggest for your consideration whether it would not be advisable to apply to the Punjab Government for 200 or 300 more Enfields, the issue of which, I feel sure, would make the border so strong that the Khán would be almost, if not quite, independent of military aid.

3. At present I believe there are 200 long Enfield rifles in the valley, and probably half of these have been retained by the Khán for the use of his own body-guard. There are also about 300 carbines, including a small number of short Enfield rifles; but these are not nearly as efficient weapons as the long rifle.

4. The normal strength of the military detachment at Oghi is 50 rifles, which admits of 35 rifles moving out to the aid of any village which may be threatened with attack; but in the event of a sudden raid in force the help the military could give would be very small, the more so as they would probably have to march 5 miles before arriving at the scene of action, which is generally in the neighbourhood of Dilbori.

5. Were 500 long Enfield rifles distributed among the villages of Belián, Jaskot, Ghanián, Dilbori and Bagrián, I am convinced that raiding would become such a profitless occupation that it would soon cease altogether.

6. During the present year an increase to the Oghi garrison has on several occasions been suddenly called for owing to raids being threatened. This would become unnecessary were a larger supply of Enfields given to the villagers.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the UNDER-SECRETARY to GOVERNMENT, Punjab, dated 5th January 1888.

IN reply to your No. 524 of 24th December, I have the honour to forward translations of the letters from the Khán of Agror to the Deputy Commissioner, Hazára, and from the Deputy Commissioner, Hazára, to the Khán of Agror, in connection with the arrest of one Turabáz, a follower of Háshim Ali Khán, Hassanzai.

Translation of a letter, dated 8th November 1887, from Khán Bahádur ALI GAUHAR KHAN to the DEPUTY COMMISSIONER, Hazára.

After compliments.—My agent, Fazl Ali Khán, returned to me from you on the 8th November 1887, and explained to me your instructions regarding the defence and arrangements of the border. I have always been thankful for the kindness of the British Government and the local authorities, and have been zealously occupied in doing service. I know that the peace of the border would be a very fortunate omen for me, and in view to the above I am incurring expenses more than I really can afford. The Government have just helped me with a yearly allowance of Rs. 2,000, otherwise I should have been ruined. The Government has helped me with good arms and money, &c.; then why should I neglect my duty and my affairs? I should spare no pains to maintain peace and order upon the border. It is evident that with the prosperity of the British Government, the border is much stronger now than it formerly was and the enemy is much weaker. But a case has just occurred which I consider injurious to my arrangements. It is as follows:—Turabáz, Hassanzai, a servant of Háshim Ali Khán who owns and cultivates some land in Sambalhat, used to come occasionally to that village to look after his crops. He came for this purpose on the 6th November, and the Deputy Inspector of

Oghi, who had sent Kachkol, Madád and Asaf of Belián for his apprehension, followed them and arrested him. This arrest may look as if it were in accordance with the procedure of the Government, but, as far as I can think with reference to the delicate condition of the border, it may be very injurious to the border. The Deputy Inspector knew that Turabáz was a Hassanzai and a servant of Háshim Ali Khán, Khán Khel. The Hassanzai are a peaceful tribe and do not intrigue with our opponents; they live quietly in their homes as well-wishers of the British Government, but the arrest of Turabáz may very possibly irritate them. The Deputy Inspector has unwisely interfered and disregarded all those facts which are likely to disturb my border. It is as evident as sunlight that on account of his relationship with Nawáb Muhammad Akrám Khán, the Deputy Inspector of Police is jealous of my reputation and of the peace of my border and the people of Agror. He would rejoice if I were disgraced and my people disturbed, and he anxiously awaits disturbances in Agror and the displeasure of the Government with me. This man has a long experience of the Agror Border and understands my interests, and still at this delicate time he has behaved in a manner ostensibly in accordance with the procedure of the Government, but in reality in order to involve me in difficulties with the Hassanzai. He knows that the Chigharzai, Akazai, and the Sayads of Pharári are opposed to me, and that only the Hassanzai have been friendly. He desired to irritate them so that they may join with the Chigharzai and Akazai and raise disturbances against me, and thus affect the border. I consider it very necessary to bring this to your notice for favourable consideration and orders.

Reply, dated 11th November 1887, by Deputy Commissioner, Hazára.

There is no doubt that the state of affairs upon the Agror Border is much better and more attention is bestowed upon the protection of the border than in previous years. This has been recognised by Government, and I congratulate you upon the jágír of Rs. 2,000 lately granted to you. Regarding the arrest of Turabáz, a warrant has been issued against him several years ago in a murder case, and moreover he has been accused in several other important cases, such as the murder of Mansab in 1880, the dacoity and murder in the village of Kulakka, theft and kidnapping a British subject in 1886, &c., &c. I should be sorry if any case were to occur disturbing the management of your border or raising difficulties for the protection of your villages. But it is evident that the British Government cannot let off a noted offender like Turabáz, merely because Háshim Ali Khán, Khán Khel, may be displeased with the arrest of his servant, and thereby attempt hostility. It would have been better if Háshim Ali Khán had forbidden his men to commit offences like those with which Turabáz stands charged. If the headmen of independent territory will not prohibit their servants from committing murder and dacoity in British territory, there is nothing surprising that when arrested they will be tried according to law. There is no doubt that Háshim Ali Khán does not approve the arrest of Turabáz, and probably he may be reported as entertaining designs to commit some offence. As he is related to you and is in your hands you will advise him suitably, and will arrange for the protection of Belián and other border villages. I hope that when the Hassanzai see that the Khán of Agror is awake and in readiness, and that his men and the British subjects are prepared to defend their villages, they will abstain from any movement.

From Commissioner and Superintendent, Pesháwar Division, to the Secretary to Government, Punjab, dated 13th January 1888.

In continuation of my letter of the 5th instant, I have the honour to forward a copy of a letter dated 4th January, from Deputy Commissioner, Hazára, to my address.

The Police should receive their rewards amounting to Rs. 140 and I ask for sanction. We have only to deal with the fact that the Deputy Inspector has arrested a notorious offender, and that is sufficient. The suspicions of the Khán of Agror that he was possibly actuated by other

motives need not be considered. They may be unfounded. The arrest was good work and should be rewarded.

2. With regard to the rest of the letter of the Deputy Commissioner, When the Khán wrote that letter to the Deputy Commissioner he was taking a perfectly simple straightforward course, laying himself open to reflections upon his good judgment and his loyalty, and was not thinking of Turabáz being a proclaimed murderer. He was full of his own anxieties as to the result upon his border of his arrest. He clearly thought that this would throw the Hassanzai tribe into alliance with the Akazai, now under blockade, the Chigharzai and the Parári Syads, all his enemies, and he anticipated increased difficulties and expenditure and perhaps the dissatisfaction of Government.

I do not know that the Khán of Agror, and I do not suspect that he is acting otherwise than loyally towards the Government, and it is in this belief that he is so, or to a very great extent so, that I am recording my opinion in this case.

3. I do not know what information is in the hands of the Deputy Commissioner against the Khán of Agror, or why he is thought to be in complete sympathy with Háshim Ali Khán, Hassanzai. The latter may be restrained by his relationship with the Khán of Agror, or the Khán may have endeavoured to influence him to keep quiet in his (the Khán's) interest.

The Khán of Agror should exercise a quiet reserve as regards Háshim Ali Khán and treat him as his near relation in disgrace with the Government. He should advise him rightly but in perfect independence and in fearlessness of the result. This he will scarcely do if he feels that he will be held in any way answerable for Háshim Ali Khán's conduct.

4. The Khán of Agror is still in a very difficult position. He has hitherto been supposed to have done extremely well; he has merited and received the substantial acknowledgments of Government. He has his border more under control and better managed than it has ever been before. I do not say that the border is in a satisfactory condition, that is another matter; but I do not blame the Khán for this. We are breaking down an old system and with difficulty introducing a new one, and I suppose that he is acting carefully and to the best of his ability in what he supposes to be the interests of Government.

He is still young and he requires continuous training; but all things considered, I suppose him to have done well in dealing with such difficulties as have arisen. He has cut himself off from his independent neighbours; and we can trust him not to conciliate them or pay them for peace; and this is a great step in advance.

5. I know that in all this he has been guided and assisted by Fazl Ali, a resident of Agror, who must share credit or discredit of his master; and another thing Fazl Ali knows is this, that if the Government were to disapprove of the conduct of the Khán of Agror its first move is almost certain to be the removal of himself from his position as adviser of the Khán, and this might even mean removal from his home in Agror and exile. Fazl Ali is acknowledged to be a very astute man. I know him well and have had much personal communication with him, and I suppose him to have advised the Khán well and to have brought about good results.

I am of course writing in entire ignorance of what the Deputy Commissioner may be able to prove to the contrary, and I am quite prepared to change my general opinion when I have before me any information that should lead me to do so.

6. It is clearly the duty of the Deputy Commissioner to bring forward everything that he knows of Agror affairs, and the more the facts he can produce may be in absolute disaccord with my general views, the more necessary it is that they should be laid before me and the Government. I may be altogether mistaken, and it is of the first importance that this should be brought to light.

7. As regards the position of the young Khán of Agror, I would say a few words. Government knows the whole story of the cross-politics of the father, and of how much I had personally to say to the education, training and guidance of the present Khán. I shall be extremely surprised if he is found to fail the Government or to be tainted with disloyalty towards it. He may make mistakes; that is likely enough and to be expected, but he will, I

think, only do wrong from fear. The Khán of Agror has first of all a bitter enemy in the Nawáb of Amb, and the latter is now extremely jealous of the advancement of the Khán, and would do anything that he could with safety to bring trouble upon his neighbour. The Nawáb talked to me at length in October, and I saw the danger that the Khán was in.

Rahmatulla Khán, the Deputy Inspector of Police in Agror, is entirely in the interest of his connection, the Nawáb of Amb; but he knows that this is understood and he is careful as to his actions; and he has done sufficiently well. He is more than 55 years of age; he knows that he is only detained in the service on account of his experience of Agror.

Samunder Khán, the Jádídár of Konsh and of Garhi Habiballa, an Honorary Magistrate and the Khán of the Khán Swatís, who is himself broken by his pecuniary difficulties and a ruined man, feels bitterly the success that has attended the Khán of Agror, and would gladly injure him; and Samunder Khán has a very large following in Hazára and influence beyond the border, and while he is profusely hospitable and genial, the Khán of Agror, on the other hand, is exactly the reverse, and is a retiring undemonstrative man who never leaves his home.

The elder brother of the Khán of Agror, living in Hazára in the Mansarah Tahsíl, is also bitterly opposed to his younger brother the Khán, and there are many who sympathise with him.

Across the border the Khán of Agror has his cousin, Abdulla of Dilbori; and the Government knows how this outlaw has been able to move Independent tribes against the Khán, his cousin (he would not allow, nor would the tribes, that they were moving against the Government because they raided on Agror. It is only the Khán they could injure).

Then there are the tribes of the Black Mountain that march with the Agror border, all absolutely in opposition to the Khán, detesting the new *régime* and the way in which they have lost all influence over the Khán, and their powerlessness to do him much harm or to make him pay them for peace. That the Hassanzai do not join the coalition against the Khán of Agror is because they do not much consider Háshim Ali Khán, or find in him a real leader of the tribe, and he has nearly got them into trouble once or twice. On the other hand they are in the hands of the Nawáb of Amb, and the latter fears the result of his allowing them to move against Agror. Moreover, the relations of the Hassanzai themselves with us have during late years been much more intimate, and this tribe begins to think for itself.

Within Agror the Khán has a strong party against him, that of the proprietary body.

Altogether the Khán of Agror may be said to have no supporter or friend, and he lives to himself.

8. I would be understood to write with diffidence and reservation. I give the condition of affairs as I understand them. It is clear that the Deputy Commissioner will differ very much from my views, and this is well known in Hazára, and the Kháns and people will at once range themselves on either side for amusement and love of intrigue, and support with statements and suspicions and suggestions the opinion which they desire should carry weight.

I am pointing out to the Deputy Commissioner that he must not be guided by the expression of my views if he has good reason for thinking that they are wrong. He should bring forward all the information that he has of recent events and intrigues on the Agror border, and help me and Government to judge of its accuracy and of the correctness of the conclusions which he is drawing, and Government should have the opportunity of deciding the action that should be taken upon the Deputy Commissioner's information.

9. As regards the last paragraph of the Deputy Commissioner's letter, I can only say that the Deputy Commissioner is bound to bring forward his opinions, however greatly they may differ from my own. His views may be founded on facts which I could not, and should not, wish to dispute; but I have asked him by this letter not yet to show these opinions to the Khán of Agror. The Deputy Commissioner might possibly be wrong, but the Khán would lose confidence, and the result sooner or later might be such as Government would be loath to see; the work of years in training and supporting the Khán will be undone, and I advise Government that the result may be most unfortunate.

The Government has only to look back to the record of past years and see the trouble that the Agror border formerly was to us, and compare that with the existing state of things when the Khán is holding his own against all comers and relieving the Government of most of its anxiety as to the border and the protection of its subjects and their property. It will be unfortunate indeed if the Khán is found to be disloyal to the Government, but the possibility must be faced with caution. A copy of this letter goes to the Deputy Commissioner for guidance.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 4th January 1888.

WITH reference to paragraph 1 of your letter P., dated 16th ultimo, I have the honour to submit a statement in the prescribed form for the reward which in my letter of 20th November I recommended for Deputy Inspector Rahmatulla Khán and eight constables of Oghi for arresting a proclaimed offender on the Agror border.

The facts of the case have been fully reported and it is unnecessary to repeat them.

Under orders in a letter from Secretary to Government, of 21st August 1886, the sanction of Government is necessary for this reward for the Deputy Inspector, and in forwarding the prescribed statement I may note that the arrest has vindicated justice against a notorious ruffian who had long been a terror on the border, has exposed the Deputy Inspector to considerable risk of vengeance, and, I venture to think, he well deserves the reward recommended.

Turabáz has been sentenced by me to seven years' imprisonment in one case, to two years in another, and has been committed to Sessions on two charges of murder.

2. With reference to paragraph 2, I regret that, while approving fully of the letter from Ali Gauhar Khán of Agror to me complaining of the Police Officer for assisting a proclaimed murderer, you are unable equally to approve of my reply to him.

The reference to his relationship with Háshim Ali Khán would not have been necessary if there were any certainty that Ali Gauhar Khán, our subject and jágírdár, were in this matter loyally ranged on the side of Government against the hostile Khán Khel.

Unfortunately the contrary is the fact. My information, which I have taken much pains to get from trustworthy sources, and is sifted and strained at the cost of much time from daily reports, leaves no doubt in my mind that Ali Gauhar Khán is in complete sympathy with Háshim Ali Khán, who does not take a single step without asking his advice.

Ali Gauhar is led in all things by his agent or, as the natives more correctly say, his "Wazír," Fazl Ali, who has complete sway over his master. Apart from the pernicious influence of this arch-intriguer, the Khán might perhaps attempt less of positive harm, but under his guidance the Khán's messages and advice to Háshim Ali and to the Hassanzai have been exactly the opposite of what he was in duty bound to give.

I record this with reluctance and with regret, but it is my duty to state for the information of Government what I have ample grounds for believing to be the true position of affairs.

As I have to report separately upon Agror affairs and the Khán's line of conduct, I need say no more here than that I shall of course be guided by the expression of your views, though I feel it my duty to state that they are founded upon inaccurate information as to recent events and intrigues on the Agror border. And in conclusion, as one main reason for choosing Ali Gauhar, though not the eldest son, to succeed his father was his relationship with the Khán Khel family, I should have thought it might be held both reasonable and politic to expect him to use in our service his legitimate influence with Háshim Ali Khán, the head of that family. With this view I wrote the paragraph in my letter to which you take exception. Meanwhile, under Fazl Ali Khán's pernicious counsels he has used that influence, but

against Government and against his own true interests, and this, I believe, he will continue to do until Fazl Ali is removed from his side or until he is awakened to a truer perception of his own advantage.

TELEGRAM from COMMISSIONER, to Lahore, dated 16th January 1888.

HAZÁRA reports to-day a raid on the night of the ninth by followers of Háshim Ali led by his uncle upon a hamlet of Ghanián in Agror. Two men murdered and two kidnapped. This is retaliation for arrest of Turabáz—my letter eight of thirteenth. Hazára suspects Khán of Agror of intrigue and proposes threatening him. I am advising different treatment of case. No further complication anticipated by me.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 17th January 1888.

I HAVE the honour to forward in original to save time a letter of the 14th January, received on the 16th, from the Deputy Commissioner of Hazára. It reports a raid on the night of the 9th instant by 20 or 30 followers of Háshim Ali Khán, Hassanzai, a resident chief of Seri (Independent Territory), led by the uncle of the Khán, by name Turabáz, upon Odigraun, a near hamlet of the village of Ghanián in Agror. Two British subjects were murdered and two were kidnapped from British territory.

2. The Deputy Commissioner, speaking of the Hassanzai clan as not implicated in this raid, draws attention to his No. 4471 of the 10th December, forwarded under cover of my No. 5815 of the 16th idem, to my address, and remarks that in that letter he reported that the Hassanzai refused to support Háshim Ali in a raid on Agror.

In that letter (paragraph 4) the Deputy Commissioner wrote that when Háshim Ali called upon his tribe, the Hassanzai and the Mada Khel, to meet and consult as to the line of action to be adopted by them, the Hassanzai named the 2nd December for the date and Kila Maidan for the place; the meeting to be held in the presence of Maulvi Abdulla, the leader of the Hindústándi fanatic colony who resides there on the right bank of the Indus.

The Mada Khel did not appear, and the Hassanzai were lukewarm and put off the emissaries of their Khán, Háshim Ali. The Deputy Commissioner thought that the Khán Khel or chief section of the Hassanzai would be ready to act in support of their Khán, but he doubted whether the rest of the Hassanzai would do so, and thought that the Mada Khel were not likely to consent.

3. It will be seen that this raid, accompanied by a double murder, is a deliberate act of overt hostility committed by the quasi-chief of the Hassanzai and Mada Khel tribes against the British Government in retaliation for the arrest in British territory of a criminal who was one of his followers. It is a flagrant deed and must be dealt with vigorously, whatever may be the results.

The Government will recollect the previous history of Háshim Ali, and how, in 1883 perhaps, he was fined Rs. 2,000 for his conduct, which sum has never been paid, and how it was decided that the Hassanzai need not as a tribe be held answerable for this conduct of their quasi-chief. There were reasons for this.

4. But without hearing what the Hassanzai have to say against such an enforcement of their responsibility in the present case, I am not inclined to allow them to stand aloof. I suppose they knew the danger to Agror, and I am not aware that they attempted to warn the Government of that danger or to restrain their chief from carrying out this act of personal retaliation.

I advise that the Hassanzai tribe be called upon at once to appear and show cause why they should not be held responsible for this raid of Háshim Ali Khán, and should not be compelled themselves to deal with the case and effect a settlement satisfactory in all respects to the British Government. I enclose a draft of a letter I propose that the Deputy Commissioner should address to the Hassanzai (Appendix 1).

This summons should be forwarded to the Hassanzai direct, and the Nawáb of Amb should receive duplicate copies to deliver to the Hassanzai, who are, or a very large and influential party of whom are, entirely in his hands, and a copy should be delivered to Háshim Ali himself.

5. The terms which I should propose to demand from and discuss with the Hassanzai on their appearing are, roughly speaking—

I. The immediate release of the kidnapped persons uninjured, and the restoration of all property carried away.
II. Compensation for the deaths of persons killed and for the kidnapping of others.
III. A fine for the offences committed in British territory.
IV. The removal of Háshim Ali from the chiefship of the tribe and his expulsion from Hassanzai territory on the left bank of the Indus.
V. The confiscation of his houses and property in Seri or elsewhere Cis-Indus.
VI. The arrest of Turabáz, uncle of Háshim Ali, and of all others engaged in the raid, of whom a list is to be submitted to us by them.
VII. Failing their expulsion also across the Indus, the confiscation of their houses and their property.
VIII. And other points will suggest themselves as the matter is being carefully worked out.

The Deputy Commissioner in his letter says that the Hassanzai threatened to burn Seri if Háshim Ali raided whilst they were in Amb. This showed what they could do. They should have prevented his raiding at all.

6. I believe that the Hassanzai will come in directly they are summoned, part of the community through the Nawáb of Amb, and perhaps part direct. I think that they will agree to deal with Háshim Ali much in the way I have proposed. If not we shall hear what they have to say. It is possible that whilst declining to act against Háshim Ali themselves they will allow us to do so, and give sufficient hostages for their own non-interference. We should have to consider then how far other tribes who are not now upon good terms with us, Akazai, Chigharzai, &c., are likely to act against us. I do not think that the Hassanzai can resist the pressure which the Government and the Nawáb of Amb can bring to bear upon them by blockade if that is found necessary. Nothing should be threatened; we must proceed with deliberation and throw on the Hassanzai the solution of the difficulty. They know perfectly well what may be hanging over them, and they will do their utmost to prevent a Military expedition moving against them.

7. As regards Turabáz, the absconded offender lately arrested in Agror *fons et origo mali*, I request the Sessions Judge not to pass sentence upon him without communicating in the first instance with me. If he were condemned to death we might have greater difficulty in effecting the release of the persons kidnapped.

8. It will be seen that I do not approve of the action which the Deputy Commissioner proposes to take as regards the Khán of Agror or his agent and adviser Fazl Ali irrespective of the recent commendatory notice taken by the Government of the working of his border by the Khán. I could not possibly sanction such a sudden reversal of our policy, or change of our deliberately expressed opinion of his conduct and character, without a most careful examination of the evidence and sources of information, and of course without hearing what the Khán and perhaps Fazl Ali may have to say in explanation or defence.

The Hazára District is and always has been a perfect hot bed of intrigue, and every person in it, whatever his station, throws himself heart and soul into a matter of this kind, and all range themselves into factions for or against any person or any party without reference to the right and the wrong. The only safe policy *at starting* is almost to set aside all suspicions and deal in a straightforward manner with the facts. This is easy enough; we have a serious retributory raid and double murder by the emissaries of this Chief of the Hassanzai. The Hassanzai must show that they are not answerable.

9. His Honour the Lieutenant-Governor will notice what the Deputy Commissioner says in the 11th paragraph of his letter enclosed :—

"The intrigues which I have related and which I believe to have been on foot could not of course be proved by evidence; all is carried on by word of mouth through trusted messengers in such a way as to leave no tangible proof behind; nothing is written except indeed on blank papers which with Hassanzai Maliks' seals on them have been procured for use when needful."

Of course His Honour will understand that I know nothing more than is contained in the Deputy Commissioner's letter. I am not aware what information he has and who his informers are. But I think I can see that clearly it is a weak case, possibly having foundation, possibly true, but very dangerous to deal with, and I do know this, that time after time we have been unable to get to the bottom of supposed intrigues against the interests of Government by the Kháns and Chiefs in Hazára. Action has been taken upon suspicion only, to leave within a few years serious doubts entertained of the justice of such action. Succeeding officials disagree with the action of their predecessors, and never have we been able to thoroughly satisfy ourselves that we have been right when we have committed ourselves to act upon mere suspicions. Nothing could be more unsatisfactory and perhaps unjust. Although we may not be able to satisfy ourselves, we can at all events avoid acting with possible injustice. If the suspicions are well founded, it cannot be believed that the parties in opposition could not prove them to conviction.

If the hand of the official is once shown there is in my opinion an end to all hopes of arriving at facts not in support of that hand.

If the suspicions of the Deputy Commissioner are well founded as regards the Khán of Agror and Fazl Ali, our best chance of obtaining facts in support of these suspicions is, I say so with deliberation, not to act upon them. Then those who may be making up a case against the Khán will seek to strengthen it, and ought to commit themselves, and if the Khán is intriguing he will gain confidence, and we shall have further indication in very many ways of the fact that he is so doing.

In our dealings with the Hassanzai, in our communication with the Nawáb of Amb, in the hundred stories that we shall hear from independent territory and from the proprietary body bitterly opposed to the Khán in Agror, something is almost certain to turn up in support of the opinion of the Deputy Commissioner if they are well founded. Once cross the line and shake the confidence of those whom we ought to be able to trust, and there is no drawing back, and no admission of error can undo the evil.

10. I can at present support none of the recommendations of the Deputy Commissioner, but I am not prepared to say that I should not do so hereafter, if matters work that way. I consider that the Deputy Commissioner has acted with caution and wisely in not directly at the present juncture pressing the Khán of Agror and summoning and removing his agent and adviser. I believe that this would have been a fatal error. These steps can be taken at any time, and I should indeed anticipate no favourable results from them just now. If we do not hold the Hassanzai responsible now, it may be difficult to do so after we have committed ourselves to laying the onus upon the Khán of Agror.

11. Under the present circumstances I should say there was no necessity for the Deputy Commissioner to proceed to Agror unless the people show signs of alarm, and for this I do not suppose that they will have any cause.

If His Honour desires it I can take up each paragraph of the Deputy Commissioner's letter and give my opinion, but without these instructions I refrain, as I do not desire to lengthen or delay this letter, and I merely advise Government to allow the Deputy Commissioner to follow the line of action I have indicated.

A copy of this letter goes to the Deputy Commissioner and early orders should be issued, and the enclosure should be returned to my office or a copy.

APPENDIX I.

DRAFT of SUMMONS to the HASSANZAI TRIBE of the BLACK MOUNTAIN.

WHEREAS Háshim Ali of Seri, generally known as the Chief of the Khán Khel section of the Hassanzai and the leader of your clan, is charged with having committed through his relations and followers a raid accompanied by two murders on the 9th January upon Odigraun hamlet of Ghanián, you representatives of the tribe are summoned to appear before the Deputy Commissioner of Hazára, and explain why you did not prevent this injury to the persons and property of British subjects by your Chief; why you did not warn Government of the danger, and why you should not be held responsible.

The Government has heard that Háshim Ali Khán declined to join in this raid, and will be glad to find that this is the case; but you must appear and explain your conduct in this matter, and show how a complete and satisfactory settlement of this serious charge against your Chief can be made with the British Government. Government will hear all you have to urge, will consider you arguments, and will then deliberately pass its orders in this case.

The first thing that the Government looks to you to do is immediately to restore to liberty the persons kidnapped from British territory by the raiders.

These persons should be sent in at once safe and sound to the Deputy Commissioner of Hazára.

It is not possible that you can avoid this responsibility, and this will be your first step to show that in this difficulty you are not as a tribe prepared to act as enemies of the British Government.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 14th January 1888.

I HAVE the honour to report that on the night of the 9th–10th instant a band of between 20 and 30 men from Seri, the head-quarters of the Khán Khel Hassanzai, made an attack on a small hamlet, Odigraun, containing four houses only, at a short distance from Ghanián in Agror, killed two men and carried off two others, besides a small quantity of property.

News came to Abbott-abad on the 11th, but the report was incomplete and the raiders were unknown. From later news received yesterday and to-day I give the main facts of the affair.

2. Odigraun is the name of a plot of land about a mile or less from the large village of Ghanián in Agror. Mír Hassan and Said Hassan, brothers, land owners of Ghanián, with one or two more, built four houses there a few years back. About 11 p.m. on the night of the 9th a band of men attacked the settlement, wounded Mír Hassan, who died ere morning, and carried off Said Hassan, his brother Haiyatulla, and a Mulla, Said Alam; they murdered Said Hassan on the way up the Black Mountain, and carried off the other two men, together with an Enfield rifle (belonging to Government) and a few other things. The raiders were led by Turabáz, son of an uncle of Háshim Ali Khán, Chief of the Khán Khel; the rest of the band were tenants or servants of Háshim Ali from Seri. The Hassanzai as a clan were not implicated; they have till now, as reported in my letters marginally noted, refused to get up a raid at Háshim Ali Khán's bidding to bring about the release of Turabáz, the Khán's servant, a noted murderer who was captured by the Police early in November on the Agror border.

Account of the raid.

10th December 1887, 4th January 1888.

The raiders retreated at once, bivouacked on the slopes of the Black Mountain, and reached Seri early next morning, where Háshim Ali Khán gave them a feast and rewards.

3. This raid was of course committed as an answer to the arrest of Turabáz, and with the intention both of stirring up trouble, such as (they hoped) would lead the Government to remove his case from the Court of Session, and of capturing one or two men who might be held as hostages for his release. I reported the arrest of Turabáz in the correspondence above quoted. He was tried by me in November on a charge of robbery and sentenced to seven years' imprisonment. He has since been committed to Sessions on two charges of dacoity and murder, one of them being the attack on Kulakka in 1883, in which some relatives of Abdulla Khán, the outlaw, were killed by these very Khán Khel in a raid similar to the one now reported.

Object of the raid.

I believe the charges on which Turabáz has been committed to Sessions are supported by good evidence, and though the result cannot be foretold, it may, and should, be a conviction, and a sentence either of death or transportation for life.

Meanwhile Háshim Ali Khán has committed this further offence in order to force the hand of Government, has now in his power two Swátís of Agror, and has given out he will not set them free till Turabáz is released.

4. Putting aside for a moment the ultimate settlement or treatment of this case, the more important point for consideration at present is as to the two men whom Háshim Ali now holds as hostages.

How to secure release of our subjects kidnapped.

I could not for a moment suggest that Government should interfere with the course of the law in the case of Turabáz. If he is sentenced to death he should be hanged; nor would I recommend that Government should treat with a petty robber chief for exchange of prisoners.

Turabáz is a notorious ruffian and murderer, and has been for years the terror of the border. In spite of the crimes he had committed, and the warrants for his arrest, he was bold enough to take land in mortgage in Sambalhat, a small hamlet within the British border, where he regularly came to look after his harvest dues, trusting to the fear in which the villagers held him, and, as I believe, in the firm assurance that the Khán of Agror would certainly not move against him on account of his relations with Háshim Ali Khán. That Turabáz should now escape the penalty of his misdeeds would be a grave misfortune, and a fatal precedent for the future. Hereafter for every murderer from across the border arrested there would be a raid in retaliation, a British subject kidnapped and held as hostage; and if we were now to recognise any system of exchange of prisoners, we might as well close our Courts of Session as far as foreign offenders are concerned. From the situation of the outlying hamlets of Agror on the lower slopes of the Black Mountain, in spite of such precautions as are ordinarily practicable, it is always possible for a few marauders from neighbouring independent territory to find an opportunity of carrying off some villager grazing cattle or cutting grass on the hills.

5. These two men must, if possible, be recovered without losing our freedom of action or submitting to any conditions as regards Turabáz, and this, I think, can only be done (1) by plainly bringing pressure on the Khán of Agror, and making him understand it will be to his disadvantage if they are not restored, and (2) in the last resort by a peremptory message to Háshim Ali Khán that he will suffer severely if a hair of their heads is injured.

Course suggested.

I make this suggestion as to the Khán of Agror, partly because I believe, in common with all native opinion, official or otherwise, that if the Khán were to will it these men would be restored forthwith, or at least after such specious delay as would not reveal too much, and partly because there is grave reason to fear that the intrigues and crooked counsels of Fazl Ali, the "Wazír" or agent, by whom the Khán is led in all things, have, directly or indirectly, brought about this raid.

I should here say that I give this opinion with the greatest reluctance, but advisedly and with a full sense of responsibility. I much regret that I should have to express my suspicion of the Khán after the views given in your letter of 16th December. Beyond what was said in my reply, of 4th January, to

which I respectfully invite attention, I had no intention of expressing any opinion as to the intrigues of the past few months until I could submit the report that was called for in connection with the Bagrián case. Unfortunately the present state of things will not allow of delay. If our hands are not to be tied in respect to a murderer who may shortly be sentenced, by the fact that two Swátís from British territory have been carried off as hostages, some means of recovering them must be considered at once.

6. To explain the position, I am compelled to give a brief account of affairs since the capture of Turabáz.

Explanation of course proposed. Intrigues between Agror and Háshim Ali Khán.

Háshim Ali Khán was much annoyed at the arrest of one of his most trusted and useful servants, and immediately set to work to get the Hassanzai and Mada Khel, of which he is nominal Chief, to intercede for him by letter. Replies were sent to their petitions, through the Khán of Agror, that the man was charged with heinous crimes in British territory and must stand his trial.

Háshim Ali Khán then sent his agents or vakíls to the Hassanzai, and called on them to consider whether the release of Turabáz should be effected by peace or war; whether they would send in a jirga or make a raid on Agror in the expectation that the matter would then be treated as a "political" one (a phrase which in Agror has a peculiar meaning). His secret endeavours were, however, to persuade the Hassanzai to join him in a raid.

It is a matter of common notoriety that Háshim Ali was (and is now) in constant and confidential communication with Fazl Ali Khán, the agent of the Khán of Agror, and that he made no step without first taking his advice. The Hassanzai were not at all inclined to engage in hostility with Government. At first they put off Háshim Ali's emissaries by saying they would not move in the matter alone; that the adherence of the Mada Khel must be secured. The Mada Khel were equally wanting in readiness to take up arms for Háshim Ali. Then the Hassanzai arranged to discuss the matter at a feast to which the whole tribe had been bidden by an old Saiyid of Tíli, who proposed to do an act of (Afghán) charity before he died. At this meeting the Hassanzai decided not to attempt action against Government, which they openly said would do them more harm than good, and they resolved to send in a jirga to intercede for their Chief's servant.

Háshim Ali was much chagrined at this, and again took counsel with Agror. The advice he got was a characteristic misrepresentation of the policy or practice of Government, as being "*parcere superbis et debellare subjectos*,"* and they were reminded that the restoration of Ata Muhammad Khán from Lahore was not brought about except by constant trouble on the Agror border.

* "Jahán tak koi quom narmi kare uske sath sarkar garmi karti hai—aur jo kaum garmi karti hai uske sath sarkar narmi se pesh ata hai."

To deter the Hassanzai from sending in a jirga men were sent to persuade them that the jirga would be detained as hostages, and this was so far effectual that the Hassanzai resolved that, as some of their elders were going to Amb to discuss other matters with the Nawáb, they would first ask him whether he would guarantee their safety from arrest. Háshim Ali sent in word to Fazl Ali Khán that a jirga had actually started for Amb. Fazl Ali was then absent from Agror, having been sent for by me to Abbott-abad on my return from camp. The messenger was kept in Oghi, the Khán saying he would reply after consulting his "Wazír." Fazl Ali's advice was that if a jirga had gone to Amb, Háshim Ali should at once make a petty demonstration or raid on some small outlying hamlet, such as he could manage with his own dependants; that on this the Nawáb would be ordered to arrest the Hassanzai. This would disgrace him with them if he did it; if he did not, the Deputy Commissioner would suspect him. Failing this, as the Hassanzai were at all events to be prevented from sending in a jirga to Abbott-abad if the Nawáb gave them any assurance, they were to be warned again that he was only deceiving them and that they would certainly be put in arrest here.

All this was heard in the mosque at Seri, where Háshim Ali discussed affairs with his uncle—and much more that Fazl Ali's messenger told the Khán Khel Chief as to what he had done in Abbott-abad. What he had told the Deputy Commissioner, &c.—matters which were only known to Fazl Ali and to myself—and the report of his conversation with me, convinces me that my

information is genuine, and correctly represents what Fazl Ali said by messenger to Háshim Ali Khán.

I should here state, to guard against misapprehension, that I have derived no information and received no reports from the Nawáb of Amb. He is certainly hostile to the Khán of Agror. I have taken great pains to get good news, and the conclusions I have come to have been formed after reading and translating scores of reports at the cost of much time and labour.

The Hassanzai heard of what had passed, and sent word to Háshim Ali that if under any interested advice he got up a raid to disgrace them while the jirga was in Amb, they would burn his village Seri. The jirga never came, the rumours of possible arrest (though of course quite unfounded) being sufficient to alarm the easily excited suspicions of an Afghán clan.

They sent in two men, however, to me with a letter, and these men corroborated what has been said as to the intrigues set on foot to prevent their sending in a jirga. I received them with more than usual kindness and tried to reassure them.

Days went on without any special result, Háshim Ali still endeavouring to win over the Hassanzai to join him in a large raid, and meanwhile keeping a careful watch through spies on villages in Agror to enable him, if possible, to carry off some British subject, or, if opportunity offered, shoot the Thánadár who arrested Turabáz.

All the time he kept up constant communications with Oghi, chiefly through one Mír Akhundzáda of Seri, whose sister is married to a headman of Belián.

What precipitated the raid.

7. A day or two before this raid took place I received information that Fazl Ali had sent a trustworthy man to Seri to warn Háshim Ali that Turabáz was to be tried shortly for offences so grave that the result, according to the "law of Government," would be either hanging or transportation; that now no other course was left but to collect the Yaro Khel of Seri, the Khán Khel, and his dependants and make a raid at once, both to create such a disturbance that Government might intervene to prevent the trial of Turabáz or stay execution, treating the matter as a "political" one by "jirga," and also in order to get into his power one or two British subjects alive to be held as hostages for Turabáz.

As a matter of fact I had a few days before this received notice from Pesháwar of the dates fixed for Sessions. Turabáz had in the Magistrate's Court named certain men of Seri as his witnesses; and I had to write to Háshim Ali Khán that his servant would be tried on the 16th, and that he wished such and such witnesses to attend. If Háshim Ali sent them their evidence would be heard. This letter was sent as usual through the Khán of Agror, *i.e.*, through Fazl Ali, and it is significant that the report last quoted was received soon after this letter had been sent to the Khán.

Situation of the hamlet attacked.

8. The hamlet fixed on as most suitable for attack was not chosen at random, but after some deliberation. This has, however, only come out in the past day or two.

At present I need only say that it is a noteworthy fact that in this case also the attack was made, not on tenants of the Khán, not on one of the small outlying settlements which run up the slopes of the Black Mountain, and are mostly occupied by the Khán's tenantry, but on a small settlement of the old "Warises" of the valley, near to Ghanián, a class whom the Khán dislikes, and whose proprietary rights were upheld at settlement in these few villages against his claims to the whole of Agror.

Again, Ghanián is almost at the furthest point of the Agror border from the Khán Khel settlements; it is in the north corner of the valley. The raiders passed over the nearer hamlets—Chakbat, Sambalhat, Chejri, Shahto, Guldheri and Bholu.

They were certainly aided by guides from within British territory, and so far it seems clear that the men of Ghanián did not turn out with any alacrity. The Khán's men from Dilbori and Jaskot, both of which are within a mile of the spot, came up too late to do anything.

9. It is not only in this case that I have had cause to suspect the intrigues of Fazl Ali Khán, the Khán's agent.

Other intrigues.

For the past six weeks I have been endeavouring to compel the Swátís of Tikri to come in and restore a sum of Rs. 650 which was extorted as ransom from a Hindu of Mansarah who was kidnapped by three men of Dharián in Tikri. A fortunate capture of three Tikríwáls by the Deputy Inspector of Oghi (the Khán with all his power and with far greater means at his disposal did nothing) enabled me to bring some pressure on the Tikríwáls. The result was that a short time ago the greater part of the sum wanted had been collected by the Malkal, Naror and Ashlor sections, who are concerned, and their jirga was about to come in.

In this case I received information that Fazl Ali had sent for three men from Tikri, had caused a paper to be written purporting to be from the jirga, sent it back by them with instructions to get the seals of some of the Maliks, to warn the jirga not to think of going to Abbott-abad except through the Khán, or they would all be arrested and a heavier fine taken, whereas the Khán would get better terms for them.

A day or two after this paper was returned to British territory, and in due course was sent on to me by the Khán. In this various excuses are made as to their not being responsible for the whole sum demanded, which had not been put forward before. From all quarters in Tikri, from the men I sent there, and from the Maliks who are interested in a prompt settlement, so as to effect the release of their relations now detained in Abbott-abad, I hear the same story.

10. Some time ago I received a report from a quarter usually trustworthy that Háshim Ali Khán had openly stated that Fazl Ali had promised that the Khán of Agror would spend a considerable sum of money to bring about the escape of Turabáz from lock-up, and Háshim Ali had a letter written to a Swátí headman, who was to be used for the purpose, to assure him of his gratitude if he was successful. I attached small importance to this, not believing that the Khán would part with his money; but it is a curious fact that a few days later a man was found loitering about the jail precincts who, when the prisoners were being taken to the latrine outside, made certain communications with Turabáz. He was arrested. His account of his business there was contradictory, but it turned out he was a tenant of Fazl Ali Khán's; nothing else, of course, could be proved.

Another instance.

11. The intrigues which I have related, and which I believe to have been on foot, could not, of course, be proved by evidence. All is carried on by word of mouth through trusted messengers in such a way as to leave no tangible proof behind. Nothing is written (except indeed on blank papers which with Hassanzai Maliks' seals on them have been procured for use when needful). At the same time I am morally convinced that Fazl Ali's action has been as described; that his and his master's sympathies have throughout been entirely on the side of Háshim Ali Khán; and that they have been working to bring about the release of Turabáz by fair means or foul.

Nature and degree of suspicion.

I saw Fazl Ali Khán in the middle of December and gave him such advice as seemed appropriate, endeavouring to convince him that his and the Khán's interest lay in straightforward dealing and the maintenance of peace on the border. It will be observed that throughout I have mentioned Fazl Ali, the agent, rather than the Khán, partly because it is notorious that Ali Gauhar Khán is a puppet in the hands of his servant, and partly because, though I have very little doubt that there have been intrigues between the Khán and Háshim Ali, there is no "evidence" such as would support any action against the Khán At the same time I may say that my suspicion is not of myself only, it accords with the unanimous opinion of all natives of experience, private or official, who have any knowledge of Agror affairs, past and present.

Kázi Mír Alam, Honorary Magistrate, through whose hands for many years most political matters passed, and whose opinion you have recorded to be most sound and valuable, expressed himself to me to this effect in the clearest terms:—"If the Khán so willed, there would be no trouble on the Agror border. Unfortunately he was entirely in the hands of Fazl Ali,

whose settled belief was that occasional disturbance increased the Khán's importance, and he would not rest until by nominally assisting to quell storms raised by himself he had secured for his master the remission of the whole revenue of the valley." And this is the general, in fact the universal, opinion in Hazára.

The immediate object aimed at, and explanation of reasons.

Relation between Ali Gauhar Khán of Agror and Háshim Ali of Seri.

12. My present object is, however, mainly to effect the release and return of the two men kidnapped by Háshim Ali Khán's servants.

Except by consenting to treat for an exchange of prisoners, a course which in my opinion should not be entertained for an instant, there appears to me only one way to effect it; that is, to make the Khán of Agror responsible. I believe (and am sure it is the unanimous opinion of the neighbourhood) that the Khán *can* do it, not by any undignified means, such as money payments, but by using his influence with Háshim Ali, and that he *would* do this, and that Háshim Ali rather than lose the friendship of Agror would restore them at the Khán's bidding, provided that both he and the Khán were convinced that it would be extremely to Ali Gauhar Khan's disadvantage if this were not done; but as it would be a bitter pill to swallow, Háshim Ali would not consent to it, unless under very strong pressure from Ali Gauhar Khán, who would only be moved to apply such pressure by the feeling that his highest interests were at stake.

It will be remembered that these two Khán's are not only first cousins, but Ali Gauhar is married to Háshim Ali's sister, and their alliance is cemented by mutual interests on the border.

For instance, had these terms not subsisted between them, Turabáz, Háshim Ali's servant, with warrants for arrest out against him in several murder cases, could never have taken land in mortgage in British territory, and come there regularly year after year to take his dues, had the Khán of Agror not countenanced and screened him.

In this connection I may add that the land in question belonged to two Saiyids who were charged with murder or some other offence and absconded. It was attached, and the Khán was directed to sell it, to which he objected that this very man Turabáz had a mortgage on it. Of course he knew the man's history well, and would hardly have respected the lien but for his alliance with the man's master.

While Fazl Ali is at his side little good can in my opinion be done with the Khán, and as, under the circumstances, the evidence does not warrant direct action against the Khán himself, the course I would recommend is as follows:—

Recommendations.

13. That I should be authorized—

(1.) To summon Fazl Ali Khán; warn him that there is reason to believe he has been instigating treacherous intrigues; keep him *in detention* here until the two men kidnapped be restored.

(2.) Inform the Khán that there is reason to believe that Fazl Ali has been giving him the worst possible counsels, and that till further orders he cannot be permitted to remain in Agror as the Khán's adviser and agent.

(3.) To write to Háshim Ali Khán and say that, pending any settlement of the case as regards the raid and murder of two British subjects, he is immediately to restore the two men he holds in captivity. If any injury is done them, that Government will visit him with the severest punishment.

And I may add that I should anticipate much good if the Khán were himself warned direct by the highest authority in the Province that the tenure of his jágír and of his position is conditional, that he must at once stop these intrigues, and that if disturbances increase or continue, he may yet find that he will lose and not gain.

I have not the least doubt that the sterner the warning and the most plainly he is admonished the better. But it should be at Lahore.

Reason for urgency.

14. My reason for these suggestions at this time is that I wish to save Government from the dilemma of either opening negotiations for exchange of prisoners, or of letting the law take its course with regard to Turabáz, at

the risk of his master's retaliating by cutting the throats of the two men kidnapped.

At the same time I should add that I think it improbable that Háshim Ali would kill them in cold blood, even if Turabáz be (as he ought to be) hanged. An Afghán will murder, in revenge for murder, without regard to individual guilt, but he recognizes a sentence of a law court as something impersonal. They may commit murders in retaliatory raids, but they, or at least these tribes on our border, seldom kill prisoners.

15. I have already stated that the Hassanzai as a clan are not implicated in this raid. Their conduct has throughout been good. They have withstood all exhortations and inducements to evil.

The Hassanzai not responsible.

The raid is the act of Háshim Ali Khán and his family with their tenants and dependants, including some Yaro Khel (Hassanzai) Gujars and other villagers of Seri.

A fine of Rs. 2,000 was imposed on Háshim Ali Khán and the Khán Khel for the raid on Kulakka in the spring of 1883, an affair very similar to the raid now reported. Three or four men, relatives of the Khán of Agror's enemy, Abdulla Khán, the outlaw, were killed in that raid. Not a rupee of the fine has so far been recovered, nor in the present state of Agror politics is there any chance of a rupee being realized.

Realization could of course only be effected by the arrest and detention of some of Háshim Ali Khán's family or dependants, and whether the Khán of Agror could or could not have brought this about within the past three years, this thing is clear, that he has not done so.

To heap up another fine on the former appears to me a useless formality, and the imposition of any fine now may well be put off until Government is in a position to exact the uttermost farthing.

16. I regret the length to which this report has extended, but it has been necessary for me to state the reason for my opinion.

Explanation why no action taken yet.

As regards Fazl Ali, I should probably have summoned him to, and kept him in, Abbott-abad on my own authority ere this, as was done for a while by a former Deputy Commissioner; but in your letter of the 16th December you took exception to my warning the Khán of Agror of the responsibility arising from his relationship and alliance with Háshim Ali Khán, or rather (as I put it in my letter) of what his enemies would say if his cousin, brother-in-law and ally, committed himself against Government, and I have thought it better to take no step of my own motion.

I have reported these matters with great reluctance for obvious reasons, but I feel it is my duty to lay before you and Government what I believe to be facts, and what seems to me the best course of action. If you decide otherwise, I shall endeavour loyally to carry out whatever orders I may receive. The position at present is a difficult one, but the difficulty I am sure lies in Fazl Ali Khán and his master. If the former were removed, and the eyes of the latter opened sternly, decisively, and once for all, all difficulties would vanish.

17. Owing to the number of Sessions and jirga cases for hearing in my Court in the past few days I have not till now been able to complete this report. The trial of Turabáz is to take place on Monday, 16th, and I will notify its result to you.

Conclusion.

Meanwhile, as time is important, it would be advantageous if orders could be sent to me by telegraph in case His Honour the Lieutenant-Governor approves of the suggestions herein made.

I should perhaps note that there is no reason to fear any general disturbance at present, though other petty raids may of course be committed by Háshim Ali Khán's immediate following.

I propose to go to Agror shortly to distribute the rifles for which I was authorized by you to indent on Ráwalpindi, and which are expected by the end of the month.

TELEGRAM from COMMISSIONER, Pesháwar, to DEPUTY COMMISSIONER, Hazára, dated 19th January 1888.

MY endorsement No. 15 of seventeenth should have asked you to say what objection you saw to my proposals, or what danger in acting upon them. Please write without reserve. Very important.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 21st January 1888.

MY No. 15 C. of the 17th January forwarded to your address a copy of my No. 14 C. of the same date to the Secretary to Government, Punjab, and my telegram, dated 19th January 1888, informed you, in continuation, that it was intended that you should point out if there seemed to you any objection to dealing with the Odigraun raid case in the way I had proposed, by calling upon the Hassanzai tribe to show why they should not be held responsible.

2. In connection with this raid on Odigraun, Ghanián, on the 9th instant, now under settlement, you will no doubt have read the correspondence in connection with the Kulakka case alluded to by you more than once in the present correspondence. Your attention is invited more especially to Secretary to Government, Punjab's No. 109 of the 6th March 1884, and my No. 1164 of the 12th March, forwarding that letter to your address and directing in unmistakable language that the Hassanzai tribe should be informed that any further outrages committed by Háshim Ali Khán would be treated as tribal offences for which the Hassanzai tribe must be held responsible.

Therefore these instructions of Government should be remembered, if you doubt whether my method of dealing with the Ghanián raid of the 9th January is correct.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 21st January 1888.

IN continuation of my letter of the 17th instant, I have the honour to forward in original also (to save delay) another letter, of the 17th January, from the Deputy Commissioner, Hazára, to my address.

It will suffice for me to say that it in no way causes me to modify my already expressed opinion as to the extreme inadvisability of acting upon the suspicions which may be held regarding the loyalty and *boná fides* of the Khán of Agror or of his agent, Fazl Ali.

I hope Mr. Cunningham may perhaps be mistaken in his conclusions regarding them. At all events I disapprove of his proposed action towards them.

2. I disagree with much that the Deputy Commissioner writes throughout his letter.

I consider that the neighbouring independent tribes are hostile to the Khán, and greatly dislike his departure from the policy of his father. I cannot help feeling afraid that the Khán may be the victim of intrigue amongst his many bitter enemies. The changes on the Agror border, which I alluded to in a former letter, are the result of the working of the Khán, to whom the tribes can not dictate as they did to his father, and with whom I cannot yet believe that he plots and counterplots as his father did.

3. We may safely hold that Háshim Ali Khán acted on the spur of the moment when he committed this retaliatory raid. Thinking only of his own grievance, and hoping to save his servant, Turabáz, he neither thought of the trouble he was bringing on himself, or might bring upon the Khán of Agror, or upon his tribe. There is no object in searching for any but the most common sense explanation of the offence.

I reiterate my conviction that it will be found that the Hazára public know already the sentiments of the Deputy Commissioner in this matter, and I greatly fear that the effect upon the Khán may not be good. The

Khán of Agror is not responsible for realizing a fine of Rs. 2,000 from Háshim Ali Khán in the Kulakka raid case of 1883, as perhaps implied by the Deputy Commissioner.

4. I cannot reconcile what the Deputy Commissioner says in his 8th paragraph of the probable result of the removal of Fazl Ali, the agent of the Khán, with his desire to remove him.

I could not support a proposal to convict the Khán or his servant upon suspicion, as the Deputy Commissioner says, not susceptible of proof. I had rather they escaped merited punishment than that we should accept what is said against them, without offering them the opportunity of explanation and of defending themselves; and in dealing politically with this border I deprecate any such move in the dark. We cannot allow the tribes or the chiefs or the people to condemn us as unjust. We can well afford to be thought slow to believe and act upon suspicion.

5. The power of the Khán of Agror is nothing compared to that of Amb or Teri.

The final clause of the 8th paragraph of the Deputy Commissioner's letter could not have been written by his predecessors, who have armed the followers of the Khán, have heaped eulogies on him for the excellent manner in which he has trained and drilled and used them.

6. The Military Officers of the garrison are liable to pick their information from their Native Offices, who learn all from Rahmat-ulla Khán, the Deputy Inspector of Police, a very dangerous man who cannot be relied upon; and I believe that they seldom can assist with a clear and safe opinion upon border politics. They have not the opportunity for acquiring correct information or the habit of carefully testing it.

7. Regarding the petition which the Deputy Commissioner encloses from certain men of Belián, a translation of which is given by me, I deliberately express my opinion that the petitioners are perhaps merely endeavouring to magnify their services before Government, and have no fear of the Khán. They fear Háshim Ali Khán, and I dare say doubt if the Khán would as vigorously oppose any attack made upon them, and as he would one on his own tenantry. The proprietary body know that they have to look a good deal to themselves. They do nothing to conciliate the Khán or help him in any way, and I dare say they do him a great deal of injustice, perhaps never giving him credit for any better motives than such as actuated his father. They may be wrong.

TRANSLATION of a PETITION, dated 17th January 1888, from ISAF, MADAD, WALI and KACHKOL, residents of Mauza Belián in Agror, to the DEPUTY COMMISSIONER, Hazára.

In re Crown *versus* Turabáz of Independent Territory.

Section 302, *Indian Penal Code, and Dacoity.*

IN this case the order of the Deputy Commissioner is to the effect that the capturer of the above accused will be granted a reward of Rs. 500.

We have arrested the accused and he is in custody. We request the favour of the reward. The Deputy Commissioner said at Haripur that he would grant each of us a gun, and we solicit the same.

We also beg to state that we have entered into enmity with Háshim Ali Khán on account of this arrest; and as Háshim Ali Khán and Ali Gauhar Khán are one we feel great danger at the hands of Ali Gauhar Khán. We are extremely apprehensive, and it is most dangerous for us to live in Agror, because as soon as he finds an opportunity he will cause our death through independent tribes or by some other means. We therefore request that in exchange of lands held by us in Agror, we may be given lands in some other place, or some allowance may be given us for our maintenance.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 17th January 1888.

I HAVE the honour to acknowledge receipt of a copy of your letter to Secretary to Government, with your endorsement of the 13th instant (received yesterday), about the position of the Khán of Agror. I regret that it did not reach me before despatch of my letter of the 14th on the same subject, or I should have amplified and explained some points which perhaps I took for granted or supposed to be understood. I propose to do so now as well as the time will permit; my reason for this being that there is a certain degree of urgency in the matter reported in my letter of 14th instant, created by the fact that Háshim Ali Khán has now in his power two men of Agror as hostages for Turabáz, who is at this moment on trial for murder.

It need scarcely be said that I write the following remarks with great diffidence in the face of your adverse views, and with due deference to larger experience. I trust that you will believe that I offer them in no argumentative spirit, but because it appears that information on these points also is essential to enable Government to form a correct judgment on the question.

2. The only points I propose to allude to here are the two main propositions of your letter of the 13th, which, I believe, I may correctly state as follows:—

(1st.) That the independent tribes beyond the border are all hostile to the Khán on account of his devotion to our interests; that they hate the "new *régime*" (paragraph 7), and would gladly get him into trouble (paragraphs 2 and 4).

(2nd.) That the information on which my opinion is found is derived solely from the Khán's enemies in Hazára or is fabricated by intrigues to promote mischief.

3. On the first point I take the tribes named as his enemies.

(1.) *The Pharári Sayads.*

Of these Mián Said is the leading man. He is engaged or betrothed to the Khán's sister. So far from the Pharáris being hostile to Ali Gauhar Khán, he was not long ago able to influence them to drive out Abdulla Khán, and so do violence to one of the strongest feelings among these clans, the duty of giving protection to a suppliant and refugee from Government.

(2.) *The Akazai.*

I can only say it is well known that half the Akazai are allies of the Khán and are completely in his confidence and in his interest. These are the following of Azim Khán and Rashíd Khán, Painda Khel of Led, and Núr Khán, Azíz Khel.

(3.) *The Hassanzai.*

This tribe is divided into two factions—the Mishar and Kishar Dala—which have for many years been identified with the interests respectively of the Nawáb of Amb and the Khán of Agror. I never heard anything to the contrary asserted or even hinted. I do not doubt that the records of Government would bear this out in reports made *ante litem motam* before the present question was raised.

Probably the correspondence about the time when the Nawáb was made to forego the tolls which he levied on the Kishar Dala Hassanzai, and was reimbursed for their advantage by a special allowance at the cost of Government would corroborate this.

Among the Hassanzai the hereditary leading section is the Khán Khel; to say that they are opposed to the son of Ata Muhammad Khán is to speak in contradiction to the voice of all Agror and all Hazára without exception, save perhaps of the Khán and his agent. Their Chief's father and the Khán's mother were brother and sister. Where interests clash, cousins may be bitterer enemies than strangers; here they have no disputes and the blood

tie is cemented by the marriage of Háshim Ali Khán's sister to the Khán himself, a connection which always implies close friendship.

(4.) *Chigharzai.*

Of the Chigharzai I need say nothing. They are remote from Agror and have neither alliance with nor against the Khán. No doubt they have raided in support of Abdulla Khán, but that was merely when taking up a brief for a client as against the Government. Abdulla has been far from the Agror border for many months and has had no connection with recent Hassanzai affairs, nor has he ever been sheltered or aided by the Khán Khel.

4. But leaving opinions aside for a moment, I venture to ask you to look at the undoubted facts. Doubtless Agror is less disturbed now than it was in old days: the same may be said of any part of the frontier from Kagán to Mithankot. It has shared in the changes brought about by our administration, by improved communications, by the building of a fort garrisoned by troops, and by the gradually taught lesson of the strength of Government.

But who have suffered in the raids which have occurred? Whose property has been injured? Whose lives have been directly attacked? Look at Kulakka in 1883. Here were living the nearest relatives of Abdulla, the Khán's enemy. In a midnight attack three Maliks, Abdulla's uncles, were killed by a band known to be the Khán Khel and servants of Háshim Ali. It has never been denied; Turabáz himself admitted it to me in Court.

Look at any other raid of the past few years. Against whom is it directly aimed? Nearly always against the property of the "Wárises," the yeoman of the valley, the villagers of Ghanián, Bagrián, Belián, &c. Take the case of the raid on Ghanián in 1884, on Bagrián in July 1887, and this last on Odigram in 1888.

In subsequent fight and pursuit some one of the Khán's tenants may be shot; but the original attack has usually been against the "Wárises," whom the Khán would willingly see destroyed. I do not say that the Khán brought about these raids; but I say that the tribes supposed to be so hostile to him did him and his agent no harm.

Again, there is another way of looking at it. Fines have been imposed on these clans. Have they been realized? If so, through whom? A large fine was put on the Khán Khel in 1883: not a penny has been recovered. The Akazai were to be punished for the Ghanián raid in 1884. Several petty offences in the past year have been committed by the factions which, as my predecessor noted, are partisans of the Khán. They are still under a nominal blockade. Their brethren are tenants of the Khán in several border hamlets. Has he ever attempted to bring pressure on them?

Take Turabáz himself. He is the henchman and most trusted servant of Háshim Ali Khán; he gets land in Agror and comes there constantly; his history is well known on the border. The Khán with a hundred tenants and servants armed with Government rifles and drilled never moves an inch to interfere with his peaceable possession of his land. Fines have been at times imposed on the Tikriwáls and others, but I never heard of the Khán doing anything, as distinguished from his agent's glib talk, towards realizing a farthing.

I much doubt, therefore, whether it is correct to say that these tribes are "absolutely hostile to the Khán." He has his faction in each of them. Those which have been most troublesome on this border are notoriously his hereditary allies. They could not "swagger" in the border hamlets as they do, if they were not sure of his countenance and secret support.

5. I come now to the second point, *i.e.*, the Khán's enemies in British territory. Of those you name in paragraph 7—

(1.) The Nawáb has never made any report about this matter, nor does he know whom to report to me.

(2.) Rahmat-ulla, the Deputy Inspector of Oghi, is hostile to the Khán, but he refrained from sending in any reports against the Khán for weeks after Turabáz's arrest. I asked him lately as to intrigues said to be on foot, and he said he knew them, but was restrained from stating what he knew for fear lest the authorities should take some other view. His life has to my certain knowledge been in danger in

the past three months, and he must keep himself aware of what goes on for his own safety's sake.

(3.) Neither Samandar Khán, Honorary Magistrate of Garhi, nor his agent, nor any of his people have ever spoken to me of the Khán of Agror in connection with recent events.

My informants are the men who were used by my predecessors, and men employed in Hassanzai country. I venture most respectfully to say that it is difficult for any one to know the facts, or perhaps I should say the *probabilities*, as to these intrigues, except the Deputy Commissioner; this is the officer who has to devote many hours weekly and even daily to reading reports and seeing men from beyond the border.

6. I must notice one point more in paragraph 8 of your letter—

"The Deputy Commissioner will differ very much from my views, and this is well known in Hazára, and people will at once range themselves on either side for amusement and love of intrigue."

I cannot tell how the Khán's and people should know anything of the kind. I have expressed my own convictions to no one. The two letters in which I reported them have been copied in my own house, and no one but the man who copied them knows what has been written. I have carefully refrained from any step which should let the Khán or the people think I doubted him; this I did in deference to your views. If you decide that my suspicions are unfounded, no harm will have been done by my endeavour to bring to light what I believe to be the truth.

7. I have sent the Khán no orders as to the raid on Odigram, pending receipt of instructions how to act.

This fact is known to the Khán, but certainly is not patent to his enemies; yet the last report I received from Seri is that a messenger from Fazl Ali had gone to Háshim Ali Khán with this message:—

"In what I have done I have worked for you, to support you, to prevent loss of your izzat. Remember this if necessary. *So far I have had no news or orders from the Deputy Commissioner.* I hope he will not have any suspicion. If he has, and if any harm should come, it is for you to show your gratitude."

The phrase italicised to some extent (to my mind) supports the genuineness of this message because, except Fazl Ali, no one connected with Agror in any way was aware of the fact there stated.

8. I do not doubt that if Fazl Ali were removed trouble would ensue; that is to say, the Khán Khel and Akazai would very soon demonstrate by their conduct whether or not they "detested the new *régime*." There would be raids with the object of forcing Government to send back the man who is after their own heart. A little patience and firmness would teach both them and the Khán the futility of this and lead to permanent quiet.

It will be easier and simpler for me personally if things are allowed to go on as they are. These are matters not susceptible of "proof by evidence." If you and Government decide my suspicions are unfounded, I shall act as if they were so, and carry out loyally any course you may indicate.

But I do not doubt for a moment that if an unbiassed person, not connected with the district, were to travel in Agror listening to all he could hear from officials or people and saying nothing, he would return with the same report that the people on the border know, and that by pointing to repeated raids and to their consequences and results can demonstrate the reasons for their knowledge that Fazl Ali is not their protector, and that he has interests in common with their enemies and the enemies of Government.

The proof of the whole matter is in the facts that when raids occur the Khán's enemies suffer. If a fine is imposed, not a step is taken by the Khán to bring any pressure on the offending tribes, who are supposed to "detest his *régime*," although his power in Agror is greater than that of any Chief I know in the Punjab border, as far south at least as the Biluch clans. For all that he does to the contrary, Agror is never shut to the offending Akazai or Khán Khel. The Agroris are completely terrorised by Fazl Ali, and the Police are but a handful compared to the Khán's armed servants.

9. This letter has had to be hurriedly written under pressure of much urgent work, annual reports, and trials in Court. I have omitted to notice

the enmity of the brothers of the Khán of Agror, which is referred to by you as a possible or probable cause of false stories being hatched against him. His brothers are certainly hostile to him, because they were practically left destitute till Mr. Fryer forced the Khán to give them some land for their maintenance (guzára); but I have never spoken to them about Agror or its affairs. I have not seen Ghulám Haidar (whom you mention) since I came to the district. The only brothers I have had any communication with are—

(1.) Gauhar Amán.
(2.) Haibat Khán.

As to Gauhar Amán, Sergeant of Police, all that has passed is that I have to reprimand and punish him for reported misconduct, and to write to you, as Inspector-General of Police, advising that, as the best means of saving him, he should be transferred to another district.

9. Haibat Khán was prosecutor in a case tried by me when I first came here, in which Ghání Khán, son of Zamán Khán, uncle and now a close partisan of the Khán, was charged with firing Haibat Khán's grass stacks. I mention this case as throwing some light on the relations of the Khán with the Khán Khel. It was tried in October, long before the present question arose, and the record can be sent for.

Zamán Khán and Haibat Khán both claimed the right to cut grass on certain land. The Káhn sent his armed men to support Zamán Khán and drove Haibat Khán off the ground. The next night the grass which Haibat Khán's tenants had collected was fired. The case proved that the Khán is on terms of close friendship with his uncle Zamán Khán. This man, Zamán Khán, is father-in-law to Háshim Ali Khán, and not long ago sent him as a present a double-barrelled gun, also (as he himself admits) two days before the raid in Odigram, he (Zamán Khán) sent a man to Háshim Ali with other presents. That messenger left Teri on the 9th, the day preceding the night on which the raid occurred—in fact within a few hours of the time when the raiders must have started.

He could not have been ignorant of what was in contemplation, but he brought no news. Zamán Khán is a mere dependant on the Khán of Agror, who employed his armed retainers in his support, and against his own brother Haibat Khán, in a manner that would have produced a serious fight, if Haibat Khán had ventured to resist (*vide* record of criminal case decided in October).

10. There is another way by which my views can be tested. Abbott-abad differs from other frontier stations in having a permanently stationary garrison. The senior officers of the Gurkha Regiments here have known Hazára for 15 or 20 years. They visit Agror every year and are in a position to hear much with ears unbiassed. Let Government quietly in the Military Department ask such officers as Colonel Sym or Lieutenant-Colonel Molloy what they hear when they visit Agror; what is the general opinion and feeling of the country side; do the people of Agror feel that the Khán supports them against the independent tribes who are so hostile to him, or do they fear the Khán even more than those clans; and is it or is it not a popular belief in Agror that any man who should openly say a word against Fazl Ali would sooner or later meet with the fate of Abdulla's friends in Kulakka; in other words, be the victims of injury at the hand of the Khán Khel or the Akazai?

11. My ideas may be wrong, but they have been reluctantly forced upon me, and still more reluctantly have I been constrained to express them. If they are accepted as wrong no harm will have been done, as I have before stated, because I have taken special precautions to keep my views to myself. My reports have not gone into the office, but have been copied confidentially in my house.

I am certain that there is not a man in the district jealous of the Khán who knows what I have reported, and my informants and news-writers are not known. They would not value their lives greatly if they were known. It will be far easier for me personally if these suspicions are thought unfounded. It will be easier for me to act as if they

were so, and things can go on without interruption in their present course.

P.S. Since this was copied I have received a petition from some men of Belián, which I enclose in original for your information, not having time to translate it. The petitioners are the relatives of Mansab, the man murdered by some Khán Khel near Belián in 1880, and for whose murder Turabáz has been tried at the Sessions now being held in Haripur, and they are the men who actually captured Turabáz and held him till the Police acting in concert with them came up. Their petition, handed to me within the past hour, shows what they expect from the Khán Khel, and what hope of support or protection they have from the Khán of Agror. They have already risked much in order to bring to justice their brother's murderer, and are compelled to speak out feelings which are believed to be shared in many homes in these border villages, but which fear prevents from open expression. Theirs is the strongest village in Agror, and if the Khán's sympathies were with them and not with the master of Turabáz they would have small ground for anxiety.

TELEGRAMS.

TELEGRAM from COMMISSIONER, Pesháwar, to PUNJAB GOVERNMENT, dated 16th January 1888.

HAZÁRA reports to-day a raid on night of 9th by followers of Háshim Ali, led by his uncle upon hamlet of Ghanián in Agror. Two men murdered, two kidnapped. This is retaliation for arrest of Turabáz—my letter 8 of 13th. Hazára suspects Khán of Agror of intrigue and proposes threatening him. I am advising different treatment of case. No further complications anticipated by me.

TELEGRAM from COMMISSIONER, Pesháwar, to PUNJAB GOVERNMENT, dated 21st January 1888.

I AM forwarding to-day another long letter from Cunningham vigourously supporting his own views, to be followed by confirmation of the correctness of my opinion regarding the treatment of Khán of Agror and his agent. Further as to responsibility of Hassanzai see your 109 of 6th March 1884 in Kulakka case.

TELEGRAM from PUNJAB GOVERNMENT, to COMMISSIONER, Pesháwar, dated 22nd January 1888.

YOUR telegram of yesterday as to raid on Odigraun. Lieutenant-Governor does not think it necessary to await further letters promised, and desires me to despatch instructions as follow :—

(1.) Write to Hassanzai tribe to effect that by our present information the raid on Odigraun was the act of Háshim Ali and his immediate followers, not of the tribe. The tribe, however, did not prevent or give warning, and the tribe was warned in 1884, after the Kulakka raid, that it would be held responsible for any future raids by Háshim Ali; therefore the jirga of the tribe will have to come in and show cause why it should not be held responsible. But before sending in the jirga the tribe must first at once force Háshim Ali to return safe and sound and unconditionally the two men kidnapped. Unless this is done, Government will hold the tribe jointly responsible with Háshim Ali, and till this is done the jirga will not be received.

(2.) Write to Háshim Ali direct demanding the immediate unconditional release of the two men kidnapped, and saying that unless this is done neither he nor any others concerned must expect any mercy from or peace with Government now or at any future time.

(3.) Tell the Khán of Agror that he has failed in this case to protect his border or to prevent his relation, Háshim Ali, from committing a most serious outrage; that he has incurred thereby the displeasure of Government and has laid himself open to suspicion; that the Government accordingly demands that he shall bring all the pressure in his power to bear on Háshim Ali for the immediate, safe and unconditional release of the two men kidnapped. If he, the Khán, fails to effect this in a month at latest, the Lieutenant-Governor will expect him to attend without fail at Lahore, bringing with him Fazl Ali, his adviser, to explain in person to the Lieutenant-Governor his failure and the difficulties which prevent satisfactory management of the Agror border.

(4.) Neither trial or judgment in case of Turabáz should be postponed in a manner likely to be attributed to the kidnapping.

TELEGRAM from COMMISSIONER, Pesháwar, to PUNJAB GOVERNMENT, dated 22nd January 1888.

DRAFT summons to Hassanzai, paragraph 2. Please substitute the Government has heard that you declined to join Háshim Ali Khán in this raid.

TELEGRAM from COMMISSIONER, Pesháwar, to PUNJAB GOVERNMENT, dated 23rd January 1888.

I AM directing the Deputy Commissioner to address Hassanzai and Háshim Ali and Khán of Agror as ordered. Shall the communication to the Khán of Agror be public or private? I strongly advise the latter, as the matter only concerns him individually.

TELEGRAM from COMMISSIONER, Pesháwar, to PUNJAB GOVERNMENT, dated 23rd January 1888.

I ADVISE that the order of Lieutenant-Governor to Hassanzai and Háshim Ali be allowed to reach them before Sessions Judge passes capital sentence on Turabáz if kidnapped persons are still in their hands. Delay scarcely likely to be attributed to anything but usual causes.

TELEGRAM from PUNJAB GOVERNMENT, to COMMISSIONER, Pesháwar, dated 24th January 1888.

LIEUTENANT-GOVERNOR agrees to the communication to the Khán of Agror being private.

TELEGRAM from PUNJAB GOVERNMENT, to COMMISSIONER, Pesháwar, dated 24th January 1888.

ORDERS should reach the tribe and Háshim Ali with the least possible delay. The trial should be carried on and sentence passed in usual course without reference to these messages, but if death sentence is passed accused should be told that he can petition the Lieutenant-Governor, who will be prepared to defer orders as long as may seem desirable.

TELEGRAM from LAHORE GOVERNMENT, to FOREIGN DEPARTMENT, Calcutta, dated 24th January 1888.

COMMISSIONER, Pesháwar, on 16th instant telegraphed report of raid on night of 9th idem by followers of Háshim Ali on hamlet Odigraun near Ghanián in Agror. Two men murdered and two kidnapped. This was in retaliation for arrest of Turabáz concerned in Kulakka raid. Turabáz now under trial for murder. Full reports have been received from Commissioner

and Deputy Commissioner, and Lieutenant-Governor's orders for immediate action have been issued. These with note of His Honour as to future course being forwarded by letter.

NOTE by His Honour the LIEUTENANT-GOVERNOR of the PUNJAB, dated 23rd January 1888.

INSTRUCTIONS for immediate action with reference especially to the recovery of the two men kidnapped have been sent to the Commissioner by telegram. We shall have to consult the Government of India before taking further steps.

2. The state of affairs seems serious and the prestige of our Government at a low point in Agror and also in other parts of Hazára. The fact is that the expedition of 1868 against the tribes of the Black Mountain, though made with a large force, was allowed to result in an impotent conclusion. It encouraged the tribes to think that our troops could do them no serious injury, and the tame and pacific attitude we have since maintained must have made them believe we are of the same opinion.

3. As to Háshim Ali, it is apparent that he openly defies Government; he raids on Kulakka in our country in 1883 with intent to murder a man whom we had acquitted and whom we had invited him to prosecute in our Courts; he murders this man and some others of our subjects accordingly, and openly admits the offence, and says he will repeat it, is fined, and refuses to pay up to date. Then, when in November last, Turabáz, one of his hired bravos in the Kulakka case and a proclaimed offender for several other cases of murder and kidnapping in Hazára, is caught in our territory, he, Háshim Ali, openly threatens us and soon after arranges a raid on an entirely inoffensive hamlet, which results in the murder of two of our subjects and the kidnapping of two others to be held as hostages to compel us to release or deal leniently with his servant Turabáz. Both these outrages seem to have been committed by Háshim Ali with the assistance only of his own section of the clan, the Khán Khel, and his own immediate servants and dependants and without assistance from the Hassanzai tribe generally. We can no doubt, particularly after the warning given in 1884, hold the whole tribe responsible, and we can proceed to try to punish Háshim Ali and his immediate following through the agency of the tribe as recommended by Colonel Waterfield; but I am strongly of opinion that for the restoration of our prestige on the Hazára border generally and for the permanent good order of the Agror border, it would be more satisfactory for the Government itself to act directly against Háshim Ali and the Khán Khel by means of a punitive expedition, working, if possible, with the co-operation of the other sections of the Hassanzai tribe, or if that is not obtained then in spite of their opposition. Another reason for this course is the necessity of punishing in some way the Parári Syads and their Chigarzai tenants for the aid and assistance they gave to Abdulla Khán of Dilbori and his brothers in the recent raid on Bagrián, in which some of our subjects in Agror were killed, and for which we do not seem likely to get satisfactory redress promptly in any other way than by an expedition. The occurrence of this raid after the excessively lenient settlement for former raids of the same kind made in 1885 shows how inevitably such leniency is misinterpreted. There were some reasons of sentiment for leniency in 1885, as the feeling of the tribes in favour of Abdulla was due to their sense that he had been wronged, but we cannot repeat this leniency.

4. It ought to be possible to combine an attack on the Parári Syads and on the Khán Khel in one operation, and so far as the Parári Syads are concerned, success would be easy and certain.

But how far, considering the difficult nature of the country, a military expedition would succeed in effectually reaching and punishing Háshim Ali and the Khán Khels without the co-operation of the other sections of the Hassanzais or with them and other tribes such as the Akazais against us, is a question upon which the opinion of the military authorities and the Commissioner and Deputy Commissioner will have to be taken, if my view that a punitive expedition is desirable is accepted.

5. What I recommend is that before accepting the Commissioner's recommendations for proceeding against Háshim Ali through the agency of the Hassanzai Jirga, the question be considered whether we should not decide at once on sending troops into the Khán Khel country and that of the Parári Syads, in any case doing our best to get the Hassanzais and Akazais to co-operate or remain neutral, but treating them also as enemies if they oppose.

6. No doubt if the terms of redress I. to VI. in paragraph 5 of Commissioner's letter of 17th January 1888 could be effectually secured through the agency of the Hassanzai Jirga, the settlement would be a sufficiently satisfactory one so far as this last particular raid is concerned; but I can hardly believe that the jirga of a divided tribe like the Hassanzais will be willing or able to do so much unless a force is collected and crosses the frontier to support the party in the tribe which may be willing; and I fear that if we begin by mere common negotiations with the jirga we shall fail to produce the immediate political effect which seems to me to be urgently required, and shall probably end as before, after degrading evasions and delays, by accepting terms of redress either palpably inadequate or practically so, because not capable of complete or continuous enforcement. For example, banishment of Háshim Ali and his associates to the Trans-Indus country or confiscation of their Cis-Indus property are terms which may be nominally agreed to without being really enforced except by way of show for a time. The same may be said of removal from the chiefship of the tribe, and as to fines no one can say who would really find the money: perhaps people in our own territory. I consider that Háshim Ali's offences are too black to be expiated in this way, that the blood of our subjects cries to us for vengeance, and that we ought to be ashamed to hold Agror at all if we cannot defend the people better against blows which are aimed at us, but fall upon them. I consider that nothing less than the surrender of Háshim Ali to be kept by us as a prisoner should prevent our sending a force into the Khán Khel country. Such surrender might, I think, possibly be secured by collecting a strong force and threatening the Hassanzais with attacks both from the Draband side and from Agror, and by an expenditure of money among leading men of the tribe. But if, as is more probable, it could not be obtained, the troops would be ready to advance and the neutrality or even partial co-operation of the body of the tribe might probably be secured.

7. As to Ali Gauhar Khán, the Khán of Agror, the hereditary and natural policy of the Kháns of Agror is well known. They wished to be despotic in Agror and as independent of the British Government as may be possible. With this aim they object to locations of police or troops in Agror and cultivate alliances with the chief men of independent tribes. The previous correspondence is full of indications that the present Khán was following the same policy as intently, if not so openly, as his father, and in 1884 the fact seemed to be acknowledged by Colonel Waterfield and by Mr. Fryer, the then Deputy Commissioner.

8. I am unable to gather from the correspondence any satisfactory indication of the reasons which since then have led the Commissioner to believe that the Khán has abandoned this policy, and has really been working in accord with the policy of our Government. I see no proof or indication of change in the Khán's policy except that in the matter of Abdulla Khán of Dilbori the Khán, finding that all the independent tribe (his friend and relative Háshim Ali Khán excepted) were actively against him, was forced to rely upon us and to take up an attitude more or less independent of and opposed to the tribes. But he got into this position not from acting in our interests or with a wish to aid our policy, but merely from selfish motives, because he decided from avarice to resume the grant his father made to Abdulla Khán, and because he was angry with Abdulla for assisting Government to bring in jirgas, which he himself was not anxious to bring in.

9. It is possible that the recent grant to the Khán of a jágír of Rs. 2,000 in the valley may have inclined him to change his policy, but it is still more probable that he and his adviser and agent, Fazl Ali, will have looked upon this as a successful result of their crooked policy, and a step to the realization of their old object of independence equivalent to that of the Nawáb of Amb.

10. It appears to me that there are very strong reasons to believe that Háshim Ali acted in concert with the Khán in the Kulakka raid of 1883 and

in this last raid on Odigraun. The Kháns of Agror have intermarried with the Khán Khel Hassanzais before, and the present Khán is brother-in-law to Háshim Ali, who has always stood his friend even when all others across the border were against him. At the very least these two raids prove that the Khán has influence enough with Háshim Ali and the Khán Khel to prevent their raiding on his own tenants and own friends in Agror, but that he has not got it, or does not use it, to prevent raids against his enemies in Agror, and does not even give warning of such raids, though he has admitted that he has perfect means of intelligence among the Khán Khel. The Khán's attitude in respect to the arrest of Turabáz was also exceedingly improper, very half-hearted, if not actually disloyal. It is apparent that from fear of Háshim Ali or from friendship to him (if not, because he was himself the real instigator of the Kulakka murders), he was greatly annoyed at Turabáz's arrest, and did not hesitate to avow it openly to the Deputy Commissioner. From the same motives he connived at Turabáz's holding and frequently visiting land in Agror, though a proclaimed criminal and outlaw of the worst kind.

11. But on the whole, though with some hesitation, I agree with the Commissioner that so soon after the bestowal of Jubilee honours and grant of a jágír upon the Khán, it is not advisable to now turn round suddenly upon him and condemn him even on the strength of the, to my mind, very weighty and convincing accusations brought against him by Mr. Cunningham. It is also, I think, desirable, for the sake of the two men kidnapped, that the Khán should have an opportunity of securing their release, which he is, I think, capable of effecting, if he, from fear or other motives, does his best towards it.

12. I have, therefore, agreed that my message of distrust and displeasure to the Khán shall be conveyed privately, and have accepted Colonel Waterfield's view, that the Deputy Commissioner should not remove Fazl Ali from his position as Agent or Wázír to the Khán at present. Of course if, when operations against the Khán Khel are commenced, the Deputy Commissioner has good reason to think that Fazl Ali is working against us, he should have power to remove him at once.

13. Whatever line of action is now adopted, whether a military expedition is decided on, or whether a jirga only is summoned as proposed by the Commissioner, we must see that the Khán acts in a thoroughly straight and obedient manner. If he does not, then, to say the least, the recent policy of granting him a jágír of Rs. 2,000 and of generally increasing his power and influence must be reconsidered. It is possible also that in the course of the action now to be taken we may, as the Commissioner says, get further information as to the Khán's proceedings in connection with Háshim Ali's raids.

14. I may add that the treatment of the present cases against the Khán Khels and Parári Syads by a punitive military expedition, not by jirga negotiations only, is also to my mind highly desirable as the best chance of correcting the Khán of Agror's crooked tendencies and putting him in his proper place. I do not think we shall ever get him to act sincerely in accord with our policy, and cease from relying on intrigues with the Khán Khels and other independent tribes till we show our teeth, and really frighten both him and them.

J. B. LYALL.

ENCLOSURE No. 4.

From OFFICIATING SECRETARY to the GOVERNMENT of the PUNJAB, to the SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 28th January 1888.

IN continuation of my letter regarding the raid on the hamlet of Odigraun on the Agror border, I am desired by the Lieutenant-Governor to forward, for information, the accompanying further report from the Commissioner of Pesháwar on the same subject, with enclosure.

2. The opinion given by Mr. Cunningham in his letter, dated the 20th instant, supports the view of the case taken in the note written by the Lieutenant-Governor before it was received.

3. The Lieutenant-Governor, however, does not think that Mr. Cunningham's letter calls for any modification of the orders sent by telegram, as Mr. Lyall only demanded of the Hasanzai that they should do their best to secure the release of the two men kidnapped. It would be practicable to withdraw the threat with which the demand was supported if this course is thought advisable before calling in the jirga. As to the extent of military operations to be undertaken, the Commissioner and Deputy Commissioner have been asked to make recommendations on the Lieutenant-Governor's note, of which a copy, as already intimated, has been sent to them for that purpose.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to the GOVERNMENT of the PUNJAB, dated Pesháwar, 23rd January 1888.

IN continuation of this office No. 21 C., dated this date, I have the honour to forward in original (to save time) a further letter of the 20th instant, from the Deputy Commissioner of Hazára to my address.

This contains his views of the proposals made in No. 14 C. of the 17th instant to your address. The inexcuseable error made in my office in copying the proposed summons to the Hasanzai tribe has been corrected by my telegram of the 22nd instant to your address.

2. It will be observed that in his 3rd paragraph the Deputy Commissioner doubts whether it is just or politic to throw the responsibility for this raid on Ghaniyán on the 9th instant upon the Hasanzai tribe. My proposal is to summon the Hasanzai and make them show why they should not be held responsible and insist upon their advising how the case is to be settled satisfactorily with the British Government. I wish to carry the tribe with Government, and make them discover the solution of the difficulty in which their own honour is concerned. It is quite true that Háshim Ali Khán holds a rather peculiar position as Chief of the Khán Khel section of the Hasanzai tribe, but I do not think that the Deputy Commissioner means that the Madda Khel and Akazai should also, in the first instance, be held to have an equal responsibility with the Hasanzai for the conduct of Háshim Ali Khán. I do not support this. But before any punitive measures are adopted by Government against Háshim Ali Khán, it will have to be decided how to deal with Madda Khel and Akazai, who, with the Hasanzai, form the Isazai tribe of which Háshim Ali Khán is the nominal head.

The Madda Khel will not I think attempt to support Háshim Ali Khán any more than the Hasanzai. They will probably act in concert with the latter tribe, but they will have to be asked what is to be done, if the Hasanzai cannot dispose of the case.

As regards the Akazai they are under blockade by Government at the present moment, but I do not think that on that account there would be any objection to calling upon them also to state how they propose to act in this matter. They may not elect to add opposition to Government in this case to their previous offences. Tribes are very often satisfied with the fact that they are already in disgrace with Government, and do not think it necessary to add to their bill of costs.

If Government have to decide to undertake punitive measures against Háshim Ali Khán it would be well to consider whether it be advisable to deal with the Akazai at the same time. I am not at the present moment inclined to support this course; the Akazai are not actively hostile. I would rather they sulked across the border than that they brought on the Shahtut land case again for settlement, and of course the inclusion of the Akazai might mean a third Black Mountain Expedition.

3. The Deputy Commissioner says he should prefer to avoid any expression which may frighten the Hasanzai into making a common cause with Háshim Ali Khán. I do not understand to what expression he is alluding, but my object is of course to separate the Hasanzai from Háshim Ali Khán, and I think they will separate from him if he does not meet their views as regards

settlement. Further, as the Deputy Commissioner expresses a wish that I should soften the expression used in my summons to the Hasanzai, this will no doubt be considered by His Honour, but the Deputy Commissioner also speaks of threats and the use of force as possibly necessary to make the necessary impression upon the Hasanzai.

I do not advise that the wording of my summons to the Hasanzai requires any alteration to meet the views of the Deputy Commissioner.

4. Regarding the Kulakka case in 1883, I have said before that that differed from this and I have pointed out that Government distinctly said on that occasion that they would hold the Hasanzai responsible in future for the conduct of Háshim Ali Khán.

5 I will ask the Deputy Commissioner now if that fact was duly communicated to the Hasanzai and if the tribe in any way protested against such responsibility. I am not aware that this has ever been brought to notice.

The fine of Rs. 2,000, imposed in 1883, was upon Háshim Alí Khán personally—and not upon the tribe or any section of it as stated by the Deputy Commissioner in his 4th paragraph, and we had to see that the Khán of Agror did not feel constrained to pay this sum for his relative. Government can now proceed to realise this sum also when it deals with Háshim Ali Khán in the present case.

I trust that our previous dealings with Hasanzai and Háshim Ali Khán may render it unnecessary to discuss the question of a military attack on Seri.

COPY of a LETTER from the DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 20th January 1888.

IN reply to your telegram of the 19th just received, asking whether I see objections to your proposals in connection with the recent raid by the followers of Háshim Ali Khán or any danger in acting on them, I have the honour to offer the following remarks. In doing so I desire respectfully to state that I still see no reason to doubt the accuracy of what I reported as to the intrigues of Fazl Ali Khán, but having discharged my responsibility in the matter, I have no wish to enter upon further arguments, and in case Government should approve the course you propose, I merely submit the following remarks for consideration in order if possible to further or facilitate your object.

2. First, as to the draft letter to the Hasanzai. In the copy enclosed in your No. 15 C., occurs the phrase :—

"The Government has heard that Háshim Ali declined to join in this raid, "and will be glad to find that this is the case." I think the words Háshim Ali here may be a slip of the pen for "*the Hasanzai*" or for "*you the* "*Hasanzai clan*," because it is certain and undoubted that Háshim Ali ordered and directed the raid which was carried out by his tenantry and servants and led by his relative or cousin Turrabáz, son of Sheikh Ata Muhammad.

Moreover the phrase above quoted seems contradictory to the sense of the preamble of the letter which says—"Háshim Ali of Seri . . . . . is "charged with having committed through relations and followers a raid, "&c." Háshim Ali did not actually accompany the raiders; the Chief of a tribe would generally only do so in case of a large attack in great force. His followers and servants sufficed for the business, but he undoubtedly ordered it.

3. The draft letter throws the responsibility on the Hasanzai. I would here remark that I am doubtful whether this is just or at the present juncture politic.

In the first place it was an affair which could be planned and carried out in a couple of days or less. Háshim Ali's immediate servants and tenantry from Seri composed the band, and I think it quite possible that it could have been effected without the bulk of the tribe knowing what was being done.

Secondly, the Khán Khel, though nominally one of the 10 sections of the Hasanzai, are to some extent separate from the rest of the clan; they live on the heights near the Agror border, while the bulk of the clan are settled down below near the Indus. Háshim Ali is always spoken of as a Khán Khel—as though he had not much more in common with the Hasanzai than with other Izazai clans (Akazai or Madda Khel).

Thirdly, the Hasanzai as a body have behaved well and given no trouble for many years in this particular matter; they have steadily withstood all Háshim Ali's inducements and entreaties, and refused to join him against Government. I should myself prefer to avoid any expression which may frighten them into making common cause with Háshim Ali. He is working hard to drag them into it, so far he has been unsuccessful. I should add that they have more than once sent men (though not a complete jirga) and did give warning that Háshim Ali was trying to rouse them and the Madda Khel to attack Agror.

The Kulakka affair of 1883 was very similar to this; the Khán Khel committed it to avenge a real or supposed injury, and it was a larger and more serious raid, but even then the Hasanzai were not made responsible.

It is true that when the Hasanzai heard Háshim Ali was meditating an attack on a border hamlet while their jirga was on its way to Amb, they warned him they would punish him if he did anything of the kind, but that was because he was then seeking treacherously to get them into trouble and bring about the arrest of their men, and such an attack would have offended their peculiar views about jirgas. Very possibly they would have punished him. But in the present matter it seems to me they have done as well as we could expect. No doubt they, like others, sympathise with Háshim Ali and would be glad to secure the release of Turrabáz, but they steadily refused to join him in any act of hostility, and this I think is about all we could hope for. The raid was by a comparatively small band of 25 men, such as could be planned and prepared in a few hours.

I would therefore avoid any action which may throw the Hasanzai into Háshim Ali's arms, but I should see no objection to endeavouring hereafter to work on them to eject and punish him. It is doubtful, however, whether any inducement short of the fear of force would bring them to this.

4. Secondly, as to the terms proposed in your letter No. 14 C., paragraph 5, I think the punishment should fall on the Khán Khel and any Hasanzai living in Seri as tenants and dependants of Háshim Ali and on his followers and servants (Gujars, &c.). It appears to me that there is small hope of realising a fine unless it is backed up by threat of an expedition. In the accounts of these tribes prepared in 1881, you will see it stated that "the "Hasanzai are not dependant on us at all. A blockade would do them no "harm." I think they are to some extent dependant on British territory, but a blockade would not injure them greatly nor produce any effect quickly.

I should, at present, make the following demands on Háshim Ali Khán and the Khán Khel:—

I. The restoration of the two men kidnapped.
II. Compensation for deaths caused and property plundered.

As to a fine for the offence, I would not name any yet. There is a fine of Rs. 2,000 outstanding against them since 1883, not a rupee of which has been realized, and to heap more on seems useless until Government is prepared to take such action as will enforce it. I would also summon in the Hasanzai jirga, and state that we expect them to assist in realising the above terms and the others which you mention, *viz.*:—

I. The expulsion of Háshim Ali Khán.
II. The confiscation of his property and that of his family in Seri: but I see no hope of bringing them to the point of carrying these out unless they are impelled thereto at the point of the bayonet.

5. Generally this tribe has behaved very well in the past 10 years; the Khán Khel, or rather Háshim Ali Khán alone, has given trouble; his Chiefship is merely nominal as regards the Hasanzai at large, and I fear that it would be impolitic to do anything which would lead the Hasanzai to suppose we meant to punish them for the Khán or with him.

If you could see your way to soften the expressions in the draft letter which might alarm a suspicious Afghán clan I think it would be well. Put shortly I would not yet hold them responsible but restrict the penalties and the threats to Háshim Ali and his immediate following—practically the village of Seri—and I would simply summon in the Hasanzai jirga to discuss the matter.

I have been many years on the frontier and in the Khyber and have never yet recommended a military expedition, and hope you will believe I am not one to suggest a resort to such a step with a light heart. But I believe a quick, sudden and short attack on Seri only by say 800 men and a couple of guns, starting in the morning and returning by night, would be more effectual than the announcement of increased fines and money penalties, and any action which will drag into the case the Hasanzai, Akazai, and probably the Madda Khel also. I would work at present on the Khán Khel alone to recover the two British subjects kidnapped, and consider at leisure whether a sudden rapid expedition by one regiment could not destroy Seri and inflict such a mark of the displeasure of Government on the Khán Khel as would suffice to cover this and the Kulakka case of 1883 as well.

If that should appear of doubtful success, a fine must be imposed and a blockade started, but the settlement will be very slow and possibly in the end not satisfactory.

P.S. This letter has had to be written immediately on receipt of your telegram and copied hurriedly to catch the post. To prevent misapprehensions I may add that I am quite aware that Government usually avoids action against a section of a tribe, but the case of the Khán Khel is peculiar, and this was recognized when they alone and not the whole Hasanzai were in 1883 held responsible for the raid on Kulakka.

F. D. CUNNINGHAM.

ENCLOSURE No. 5.

From OFFICIATING SECRETARY to the GOVERNMENT of the PUNJAB, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 2nd February 1888.

IN continuation of my letter dated January 28th, 1888, I am directed by the Lieutenant-Governor to submit, for the information of the Government of India, a copy of the correspondence on the subject of the raid perpetrated on the hamlet of Odigram on the Agror border at the instance of Háshim Ali Khán, Hasanzai.

2. The views of the Lieutenant-Governor on the information afforded by these papers are expressed in the telegram from this office dated the 30th January 1888.

TELEGRAM from the DEPUTY COMMISSIONER, Hazára, to the SECRETARY to the GOVERNMENT of the PUNJAB, dated 26th January 1888.

IN continuation of correspondence about recent raid, I have evidence and sworn depositions of men who were present that a few days after this raid the Agent mentioned in my No. 80 C. of 14th, paragraph eleven, men, brother of Háshim Ali Khán, and his cousin, Turabáz, leader of the raid in jirga in Agror; evidence tallies with earlier reports from Seri even to supply of cartridges then given for the rifle which was carried off in the raid; witnesses are prepared to depose to this in Lahore if thought advisable and in presence of the Agent. I report this for information only, and may ere long have unanswerable proofs of what has been reported.

TELEGRAM from the DEPUTY COMMISSIONER, Hazára, to the SECRETARY to the GOVERNMENT of the PUNJAB, dated 28th January 1888.

TELEGRAM of 26th has been repeated; its meaning is that Fazl Ali, Agent of Khán of Agror, met Háshim Ali Khán's brother and cousin, Turabáz, leader of the raid, had interview with them by night, near his own village in Agror a few days after raid, and after discussing affairs gave Turabáz, leader of raid, cartridges for the rifle which Turabáz carried off in the raid.

From the COMMISSIONER and SUPERINTENDENT of the Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 26th January 1888.

WITH reference to your No. 139 of the 24th, I am sorry that I did not know before something of the personality of the kidnapped persons.

I quite agree with you as to the value of the little facts which come to light, tending to confirm what can only be guessed at in larger matters, and I myself should have felt that there would be a better chance of arriving at conviction regarding the Khán of Agror the less he was made aware of suspicions attaching to him.

2. I quite agree with you that on this occasion at the present moment it is advisable not to assert the tribal responsibility, so as to alarm the tribe, and it appears to me that the orders of His Honour the Lieutenant-Governor exactly meet your views. In carrying out these orders you will no doubt be able to anticipate their effect upon the Hasanzai, and will report if you see any difficulty, or if you desire any alteration in the procedure directed by His Honour.

3. I should hope that the Hasanzai would by their dealings with you in Council be confirmed in their determination not to support Háshim Ali Khán.

The previous release of the kidnapped persons is insisted upon by His Honour the Lieutenant-Governor. The settlement of the case is for consideration and discussion in communication with the representatives of the tribe. I am not aware what you would propose to substitute for the terms roughly sketched in my letter of the 17th to the Punjab Government, but if you will make proposals they will receive careful consideration.

4. You certainly must avoid driving the Hasanzai into coalition with Háshim Ali Khán—one might hope that the Nawáb of Amb would prevent this, but on the other hand we have always to fear his possibly advising for ill the Hasanzai in order that they may be coerced by Government for his benefit and glorification.

I don't myself think that a further raid is likely, but this is a personal opinion, and will not I am sure allow you to feel less upon your guard. Snow has I hope fallen since you wrote.

From the DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT of the Pesháwar Division, dated 24th January 1888.

IN continuation of previous reports about the raid on Odigram and with special reference to the question discussed in paragraph 14 of my letter of 14th instant, and to my telegram of 19th instant, I have the honour to state that of the two persons kidnapped one Said Alam is a Mulla, the other Haiyatulla, a boy of about 14 years.

It is important to bear this in mind because it affects the question of the necessity or advantage of staying sentence in the case of Turabáz. It is very unlikely that Háshim Ali would touch a Mulla, and not at all probable that he would seriously injure the boy who is his prisoner. I mention this because it seems to me desirable not to stay judgment if possible. The removal of Turabáz to Pesháwar may encourage a second act of retaliation under the impression (whether correct or incorrect is immaterial) that the first has had its designed effect and another will assist towards his release.

Even now reports from Seri state that an Akhundzai of Agror has written to Háshim Ali to say that Said Alam's wife had come to him for his intercession that, though Said Alam was a Swáti, he also was a Muhammadan

and a Mulla, and as he had done no wrong he should not be injured; that Háshim Ali Khán and Turabáz, his cousin (the leader of the raid), consulted on this, but decided they would not do anything without referring to Agror.

2. The last statement may be true or not; my informants mention in their reports of the messages which reach Háshim Ali from Agror so many little points which are known to me, and are certainly not known to the Khán's enemies or to those whose jealousy might prompt them to lie about him (even if these reports came through the medium of such persons which is not the case) that my belief in the general correctness of the reports is daily strengthened.

3. The following is an instance, it will seem, and is trivial, but accuracy in small points is a test of the correctness of the news, and as I cannot lay before you and Government now my English abstract of the whole case I am compelled to quote instances.

It was to be expected that Háshim Ali or his friends would send some one to Haripur to pick up news as to the probable result or consequences of the sessions trial.

I rode down to Haripur to see the Public Prosecutor, and instruct him with regard to possible withdrawal of prosecutions in other cases under section 17 of the Frontier Crimes Regulation. While I was there something passed between me and one of the men there who is not connected with Agror. He was questioned as to the case by Háshim Ali Khán's messenger.

To-day I have received a report from Seri, through my informer, saying that Mír Ahmad Khán, Malik of Belián, had sent a message to Háshim Ali Khán to the following effect:—

"Said Gul, my brother, went to Haripur in the sessions case. I gave him "your message and told him what to do. He has returned. He made "enquiries and a man told him what passed with the Deputy Com- "missioner—" and here follows exactly what did occur: though what was said and done was of no importance, yet it was known only to the person whom Mír Ahmad's brother questioned and to myself.

I rode down to Haripur alone, unaccompanied by any amla and returned alone; and when I find conversation of this kind reported to me not from Abbott-abad or Haripur but from Seri, where messages are more freely discussed than they would be in British territory, I have small hesitation in saying that they confirm in my mind the impression that the message is reported to me *as it is delivered in Seri;* and that Mír Ahmad Khán did report to Háshim Ali what my informant heard at Seri.

Such corroborations and opportunities for testing reports recur frequently, and the men I employ are not known to those whom you have mentioned as open to suspicion owing to their jealousy of the Khán, nor to any of their class.

4. With reference to your letter just received of 21st, I can only say that though Government did in 1884 direct that in future the Hasanzai should be held responsible for the conduct of Háshim Ali Khán, yet with great deference to an order passed, I would not on this occasion, *at the present moment*, assert that responsibility so as to alarm them.

Háshim Ali is still trying hard to get them to join him in a raid on a large scale, and has sent men for that purpose to Tili and Kanar.

So far the Hasanzai have behaved as well as we can expect, they have from the beginning withstood all his entreaties and arguments.

Hereafter I would certainly let them know we hold them responsible to assist in enforcing against Háshim Ali the conditions you propose, or some of them, the entire lot of conditions imply the surrender of 25 men and the depopulation and confiscation of Seri, and nothing short of an expedition or the imminent fear of one would secure all.

To frighten them *now* is to drive them straight away into a coalition with Háshim Ali, and it would then be necessary at once to strengthen the garrison at Oghi. Even that would not prevent a raid on a larger scale than the attack on Odigram, and in such a case even more serious steps might be necessary than those which I proposed at the outset.

From the SECRETARY to the GOVERNMENT of the PUNJAB, to the COMMISSIONER and SUPERINTENDENT of the Pesháwar Division, dated 30th January 1888.

LIEUTENANT-GOVERNOR agrees with Deputy Commissioner and yourself that the responsibility of the Hasanzai should not be asserted in such a way as toalarm or impel the tribe to make common cause with Háshim Ali. If the Deputy Commissioner thinks it advisable he may modify the Lieutenant-Governor's message to Hasanzai so as to avoid alarming them.

ENCLOSURE No. 6.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 6th February 1888.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letters dated 22nd October 1887, and dated 10th January 1888, asking for further particulars regarding the raid on the Allai border of the Hazára District which occurred in July last. In reply I am directed to submit the papers noted in the margin and the following brief remarks as an intermediate explanation of the present state of the case.

Commissioner, Pesháwar's No. 3759, dated 10th August, with enclosure.
Commissioner, Pesháwar's No. 3916, dated 20th August, with enclosure.
Commissioner, Pesháwar's No. 22 P., dated 4th January 1888, with enclosure.

2. It will be in the recollection of the Government of India that a full history of our relations with the Allaiwáls was given in Mr. Mackworth Young's letters, dated 23rd August 1880, and dated 17th September 1881. At the time when the second of these communications was written the question whether a punitive expedition should be directed against the Allaiwáls was under consideration. The demands outstanding against them were :—

(1.) The payment of Rs. 5,000 out of Rs. 10,000 imposed on account of the raid on Battal;
(2.) The payment of Rs. 500 on account of the attack on the survey party under Mr. Scott in 1868; and
(3.) The submission of Arsala Khán.

3. The Government of India was of opinion that the objects to be attained were hardly worth the trouble and expense involved in a movement across the border of more than 7,000 men as then proposed by General Kennedy. Under these circumstances the idea of an expedition was dropped.

4. On the 4th of July last two raids simultaneously occurred in the northern corner of the Bhogarmang Glen above Jabbar. Some British subjects and cattle were carried off, and a party of raiders under Mukaddas, a Madda Khel Allaiwál, was pursued and engaged by the people attacked, and from this party the women and cattle seized were recovered in the fight which happened at a place called Dhanna. A woman and three men were wounded on our side, and on the side of the raiders one man was shot dead and some others were wounded.

5. The cause of the raid was that last year Mukaddas brought a claim in our Courts against a Hindu of the Hazára District charging him with the surreptitions taking of *kuth* in Allai and its importation into Hazára. The claim was dismissed by the Courts after inquiry, and the double raid was planned and carried out, not against Mastu, but against others of our subjects as a protest against the decision.

6. On the 6th of August the Deputy Commissioner reported that Arsala Khán of Allai had compelled Mukaddas to return all the property seized in these raids, together with the captured British subjects, and that they were made over to the Tahsíldár of Mansahra in safety on the 23rd July. It has since appeared that some part of the property has still to be recovered.

Mr. Thorburn, however, at that time noted that nothing remained to be done but to punish the Madda Khel section of the Allaiwáls when opportunity might offer. By an oversight, which is regretted, this report was not forwarded to you with Mr. Young's letter, dated 3rd November last.

7. Some intermediate correspondence has been passing between the Commissioner and Deputy Commissioner in connection with this case, but all the papers have not yet been submitted to Government. From the Commissioner's latest report, of the 4th January, it will be seen that the Deputy Commissioner, under instructions from the Commissioner, proposed to Arsala Khán that the case dismissed by the Courts should be re-opened by being referred for settlement to a council of elders. But Arsala Khán refused to accept even this remarkably compliant proposition unless a substantial award in his friend's favour was guaranteed by the Deputy Commissioner. It seems that of the cattle and goods carried off the part which has been recovered is valued at Rs. 2,900 out of a total value of Rs. 3,585. Ransom money paid is also due to Mastu, and to this is also to be added blood-money for the woman who has died of her wounds, and compensation to the three men wounded. The total claim still outstanding against Mukaddas is thus about Rs. 1,000. The raid is said not to have been the outcome of any general hostility of the tribe, but the act of the individual who supposed himself to have been wronged. The Deputy Commissioner has been directed to consider whether, if justice cannot be brought home to Mukaddas and his followers, it will be necessary to deal with the Madda Khel section or with the Allaiwáls generally.

8. The Lieutenant-Governor remarks that the papers herewith forwarded strongly support the opinion he expressed in his note on the subject of the recent raid on Odigraun as to the low point at which our prestige now stands on the Hazára border, due to the very tame and pacific manner in which we have treated the border raids for many years past. A further illustration of the same undesirable state of things is afforded by the case of Feroz Sháh (one of the Sayads who formerly occupied Mandi and Sittána), which is about to be reported to the Government of India.

9. I am to add that Mr. Lyall has consulted the Commissioner further in the present case, and has called for certain particulars to enable him to see clearly how we stand in relation to the Allaiwáls, both with reference to this and former raids. On receipt of the Commissioner's reply a further communication will be addressed to you.

From Deputy Commissioner, Hazára, to the Commissioner and Superintendent, Pesháwar Division, dated 6th August 1887.

In continuation of my letter, dated 10th May 1887, on Allai raid led by Mokaddas (Madda Khel), and with reference to your letter, dated 14th ultimo, to me, I have the satisfaction to report that Arsala Khán of Allai compelled Mokaddas to return all the looted property, together with the captured British subjects.

They were made over to the Tahsíldár of Mansahra on the 23rd ultimo in good condition. To put pressure on Arsala Khán I had arrested 54 Allaiwáls, but released them on finding that the cattle of British subjects were grazing in Allai, and under a belief (which the event justified) that Arsala Khán was acting in good faith.

2. Nothing now remains to be done but to punish the Madda Khel section of the Allaiwáls when opportunity offers. The Madda Khel are a small Pathán toppah or community of some 300 or 400 houses in Allai. The raid, as was originally reported, was in revenge for Mokaddas failing last winter to obtain what he considered redress for an alleged surreptitious uprooting of the kuth plant from his territory by a Hindu British subject. I have read Mr. Cunningham's proceedings in the case and consider that Mokaddas had no grounds to feel aggrieved.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 14th July 1887.

WITH reference to your report, dated 12th July 1887, to the Secretary to Government, Punjab, regarding a raid on British territory by certain persons resident in and connected with Allai and led by one Mukaddas, the raid was on the northern corner of the Bhogarmang Glen above Jabbar; nothing but cattle tracts reach this place; there is no road to it. The exact extent of the loss of British subjects should be ascertained.

2. The Maliks of the glen should show cause why the graziers in their limits should not invariably be accompanied by armed guards.

3. The Allaiwáls and their property seized should be reported, together with the reply of Arsalla Khán.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab.

ON receipt of your letter of the 3rd November, I called upon the Deputy Commissioner, Hazára, to furnish a reply to mine of the 18th October, with which I had forwarded a long memorandum in the case, written after a perusal of the Vernacular and English files.

The Deputy Commissioner, Hazára, replied at length to that memorandum on the 21st November, and I awaited a further communication from him.

2. I have now the honour to enclose a copy of the Deputy Commissioner, Hazára's last letter, of the 21st December. It will be seen that it is not possible to deal with Arsalla Khán, the leading man of Allai, satisfactorily in this matter. He wishes the case prejudged, and will not further my attempt to have the dispute between Mukaddas of Allai and Mastu, the Hindu trader of British territory, settled by a council of elders, or by arbitration upon its merits. It therefore remains unsettled.

Out of Rs. 3,585 of cattle and goods carried off some Rs. 2,900 worth were recovered. A balance is left due to Mastu of Rs. 575, also ransom money paid Rs. 110—total Rs. 685. To this has to be added blood-money for a woman, a British subject, who died of her wounds, and compensation to three men slightly wounded, giving a total of about Rs. 1,000.

The raiders actually lost one killed and two wounded.

Thus if any sum could be found by arbitration due to Mukaddas by Mastu, Hindu, for damage done to his property in the káth root, probably more than the amount of such damage would have to be recovered from Mukaddas for damage done by his raid in British territory, irrespective of fine.

He is thus not likely to appear for a peaceable settlement of any claim upon Mastu.

3. The order therefore of Mr. Thorburn, dated 19th July, will remain in force, and this is for the arrest, wherever found in British territory, of the family and immediate followers, aiders and abettors of Mukaddas in his raid.

The raid was as the Deputy Commissioner remarks in his reply to my memorandum, "not the outcome of any general hostility of a tribe, but the "act of an individual in alleged redress of some fancied wrong."

4. The Deputy Commissioner will be directed to consider later on whether, failing to bring justice home to Mukaddas and his followers, it will be necessary to deal with the Madda Khel section or with Allaiwáls generally. It may or may not be advisable to hold them responsible for Mukaddas and his misdeeds.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 21st December 1887.

IN continuation of my letter of 21st November, I have the honour to state that the Deputy Conservator of Forests tells me that "káth" grows fairly abundantly in British territory at the head of the Bhogarmong Valley, both in Government preserves and on the village lands of Jabar and Dewali.

2. Under your orders a letter was addressed to Arsalla Khán, suggesting that he should send a few respectable men of the neighbourhood in question to form a jirga in association with men of British territory to settle the claim of Muqaddas against Mastu, Khatri, and word was sent to Muqaddas to attend at the same time and bring his witnesses, if he had any. Arsalla Khán has replied that unless he receives a written promise that his jirga will get a substantial money decree in favour of Muqaddas he will not send a jirga, because if they returned empty-handed his own dignity and importance would appear to suffer.

Even if any damages could justly be found at the suit of Muqaddas against Mastu, which on a review of the whole circumstances I am inclined to think somewhat doubtful, there would have to be deducted from such damages a sum of nearly Rs. 1,000 on account of property lost and injured, one woman killed and men wounded in the raids brought down by Muqaddas, as noted in my letter of 21st November.

This set-off, though it might be reduced by the jirga, would still in probability swallow up any damages which might be found by them to be due from Mastu; certainly any which I should be inclined to confirm under Section X., Regulation IV. of 1887, and it is therefore quite out of the question to give Arsalla Khán or anybody else any kind of assurance in anticipation.

3. Mastu's reply is clearly very much strengthened by the fact that kath is found in British territory on the eastern slopes of the same mountain range from the other side of which Muqaddas alleged kath had been stolen from his lands.

Muqaddas had ample opportunity in 1886, but never produced any evidence to show that Mastu was connected with any collection of kath from his land in Allai.

The Allaiwáls do a certain amount of trade in selling this root to Kashmir merchants and others, and if, as Muqaddas alleged, there was any trespass on his lands in his absence from home, it is quite as likely to have been committed by Allaiwáls and the proceeds sold to Kashmíris as to Mastu himself.

ENCLOSURE No. 7.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Camp, 7th February 1888.

I AM directed by the Lieutenant-Governor to submit, for the information of the Government of India, a copy of the letter marginally noted from the Commissioner and Superintendent of the Pesháwar Division, reporting the institution of a blockade against the Swáti community inhabiting Tikri.

Dated 3rd January 1888, and enclosures.

2. It will be seen that on account of the kidnapping of one Jowáhir, Khatri, of Mansahra, the Deputy Commissioner of Hazára has been authorized to arrest and detain, under Section 23 of the Punjab Frontier Crimes Regulation, 1887, any members of the Tikri Swáti tribe found in British territory, and to call at once upon the tribe for an explanation of their conduct.

3. The Commissioner of Pesháwar has been requested to furnish all the particulars of the case known to him, and a further report will be submitted to the Government of India in due course.

4. I am to add, with reference to the letter marginally noted, that this outrage is another instance of the insolence of the tribes on the borders of the Hazára District. Tikri is perfectly open to attack from British territory, and can be entered either from Konsh or Agror (*vide* Paget and Mason, pages 20 and 23). The situation of the valley accentuates the contempt of British authority which the outrage implies.

This office letter dated 26th January 1888.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Lahore, 3rd January 1888.

WITH reference to the instructions contained in Punjab Government Circular of 24th September 1883, forwards a copy of this office No. 5,895 of the 21st December, to the Deputy Commissioner, Hazára, sanctioning the arrest and detention, under Section 23 of the Punjab Frontier Crimes Regulation, 1887, of any members of the Tikri Swáti tribe. This is practically a blockade of the tribe, owing to the kidnapping of certain Khatrís in the Hazára District by members of that tribe.

The Commissioner does not anticipate any difficulty in the settlement of the case.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 21st December 1887.

I HAVE the honour to sanction the arrest and detention, under Section 23 of the Punjab Frontier Crimes Regulation, 1887, of any of the Swáti community inhabiting Tikri on account of the kidnapping of Jawáhir, Khatri, of Mansahra, who is supposed to have been released only upon the payment of a heavy ransom.

If you have not already done so, you should call at once upon the Swátís of Tikri for an explanation of their conduct, informing them that they are charged with, and will be held answerable for, this offence, unless they appear and show cause against. They should be directed to return the ransom money, and restore any property taken, and to appear before you for a settlement of this case.

The two sections of Malkál, and Ashlor Naror, comprise, I think, the whole Swáti community of Tikri, except certain Sayads residing in some four small villages. I think these Sayads should be included among those against whom the orders issued in this case are to have effect. I see no reason for excluding them.

ENCLOSURE No. 8.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 20th February 1888.

IN continuation of my letter dated the 2nd instant, I am desired by the Lieutenant-Governor to submit, for the information of the Government of India, a copy of the further correspondence marginally noted connected with the raid on the hamlet of Odigraun.

Letter dated 10th February 1888, from Commissioner, Pesháwar, with enclosures.
Punjab Government's No. 75 of this date.

2. No replies have yet been received to the messages which the Lieutenant-Governor caused to be sent to the Khán of Agror, Háshim Ali Khán and the Hasanzai tribe. There is no present probability of a raid in force on Agror, and further evidence has accumulated tending to connect Fazl Ali, Agent of the Khán, with the outrage.

3. In these circumstances the Lieutenant-Governor has approved the instructions given by the Commissioner to the Deputy Commissioner to summon the Khán of Agror and Fazl Ali to Abbott-abad for an explanation of the suspicious circumstances which have been ascertained.

4. The Deputy Commissioner has further been authorized to act as may be necessary in regard to the removal of Fazl Ali from his position in Agror and his detention in security.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 10th February 1888.

IN continuation of this office No. 37 C., dated 31st January, I have the honour to report that I duly repeated to the Deputy Commissioner, Hazára, by my telegram of the 1st instant, your telegram of the 31st ultimo, to my address.

This permitted the Deputy Commissioner, Hazára, to modify the message of His Honour the Lieutenant-Governor to the Hassanzai, if he deemed it necessary, in order to avoid alarming them.

2. I now forward in original (to save time) two subsequent letters from the Deputy Commissioner, Hazára, of the 4th and of the 7th instant, to my address, together with a copy of mine dated 10th instant (this day), to the Deputy Commissioner, Hazára, in reply. I trust that my instructions will be approved by His Honour the Lieutenant-Governor.

3. We know nothing as yet of the results of the communications made in accordance with the orders of the Lieutenant-Governor to the Hassanzai tribe, to Háshim Ali Khán and to the Khán of Agror.

The Deputy-Commissioner is not yet prepared with proposals for action to be taken upon the confidential note of His Honour dated 23rd January.

The Hassanzai are thought to be anxious to avoid collision with the Government, and are supposed likely, by pressure brought upon Háshim Ali Khán, to secure the release of the two prisoners kidnapped from Agror.

Further evidence having accumulated against Fazl Ali, the agent of the Khán, both the Khán and his agent will be brought into Abbott-abád, and Fazl Ali will, after examination, probably be removed from his position as agent of the Khán, and be detained in Abbott-abád pending further orders.

4. It is almost impossible for me to attempt to anticipate the results of these measures, but one thing is certain, that we have before all men a good cause, and that the Government is justified in any measures to punish the raid on the hamlet of Odigraun and to effect the release of the two persons kidnapped at that time from Agror.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 4th February 1888.

IN reply to your telegram of 31st ultimo, forwarding a telegram from Secretary to Government, authorizing me, if it appeared advisable, to modify the terms of the message which His Honour the Lieutenant-Governor has directed to be sent to the Hassanzai tribe, I have the honour to report that the orders of Government contained in an earlier telegram, of 22nd January, reached me on the 27th idem under cover of your endorsement of the 24th, and Parwánas were despatched on the 28th, in accordance with the orders of Government, to the Hassanzai Maliks, to Háshim Ali Khán and to the Khán of Agror.

I do not think that there is any necessity to modify the terms of His Honour's orders to the Hassanzai, which appear to me in every respect fitting and appropriate, and I do not anticipate any harm from the message having been sent to them in its original form before I received a copy of the Secretary to Government's telegram with your No. 31 of the 31st January.

My letters of the 20th and of the 24th January, advising that for the present the Hassanzai should not be treated as responsible in the same degree as Háshim Ali Khán, were written and despatched before receipt of His Honour's orders on the subject, which reached me on the 27th ultimo, and my remarks in those letters had reference to the draft summons to the Hassanzai enclosed in your No. 14 C. of the 17th ultimo.

The Khán of Agror will have received His Honour's orders on the 29th ultimo, but so far I have received no communication from him on the subject, nor have I yet heard what effect the orders sent to the Hassanzai Maliks and to Háshim Ali Khán had upon them or in what spirit they were received.

2. I have also to acknowledge receipt of yours of 31st ultimo, forwarding a letter, of 26th idem, from Secretary to Government, and a minute by His

Honour the Lieutenant-Governor upon matters connected with the late raid, and further yours of 31st forwarding copy of a letter of 28th January from Secretary to Government to Government of India, Foreign Department.

Before submitting any further report as to the manner in which His Honour's views and policy can best be carried out, it will be necessary to see what the Hassanzai are prepared to do. I am about shortly to go to Agror in camp, and after full consideration will submit a report on the various questions raised in His Honour's minute.

3. Meanwhile there are certain matters which can at once be reported for the information of yourself and Government.

Heavy snow fell on the Black Mountain on the 21st, 22nd, and 27th, and the direct roads from the Hassanzai country to Agror are for the present practically closed.

There are still two routes by which raiders could pass; one runs within, and the other along the border of the territory of the Nawáb of Amb. On these routes there is less snow, but the fact that they are within the Nawáb's territory makes them, and has made them for years past, practically closed to raiding parties of the Khán Khel or Hassanzai.

For another month there is no fear of any raid in force on Agror.

The men of Sambalhat, a hamlet on the border near Seri, sent two Sayads to the Sayads of Tili begging them to intercede with Háshim Ali Khán to spare their village. These men returned to British territory with the report that in every hujra the Hassanzai were congratulating themselves on the passes being blocked, because the snow would compel Háshim Ali Khán to keep quiet for a time and prevent his dragging them into acts of hostility against Government.

While the snow protects our own border it will also probably to some extent hinder or delay the Hassanzai from collecting for united action against Háshim Ali Khán; but I think there is reason to hope that they will bring pressure on him to release his prisoners, and, on a condition to be named below, it is possible that they might be induced to expel him from Seri, though it may be doubted whether anything but the imminent fear of an armed expedition would impel them to seize and deliver him up.

4. The condition I have referred to is the removal from Agror and the temporary detention in Abbott-abád of Fazl Ali, the Khán's agent, who is the focus of all intrigue hostile to Government, and will while he remains there be a serious impediment to the fulfilment of its wishes.

(1) Of 17th January.
(2) Latter part of paragraph 1 of No. 139 of 24th January.

In connection with this I invite attention to my letters marginally noted.

The immediate object of Government is the restoration of the two prisoners now in the hands of Háshim Ali Khán, and all my information goes to show that Fazl Ali has worked, is working, and will work to prevent this.

Within the past week I arrested two men of Agror who are known to have been used in the intrigues between Oghi and Seri; both are partisans and close allies of Fazl Ali Khán, and one of them is believed to have guided the raiders on Odigraun. The mother of one and the wife of the other are Khán Khel women of Seri nearly related to Háshim Ali.

These men, on being arrested, sent word to Fazl Ali to arrange for their release and to inform Háshim Ali Khán.

Their relatives were summoned to Shamdarra, Fazl Ali's home near Oghi, whence one of them was straightway sent to Seri. Háshim Ali was much vexed at the arrest of these men, and Turabáz, his cousin, who led the raid on Odigraun, said openly they owed so much to their assistance that Háshim Ali would do well to set free his two prisoners, if that would procure the release of the two men mentioned.

Háshim Ali decided to consult the Khán, who sent for Fazl Ali, and their reply to Háshim Ali Khán was, "If you release your prisoners, what hostages have you for the safety of Turabáz? Keep them, and I will bring about the release of the other two in another way."

5. Further, I would invite attention to my telegram of the 26th ultimo. I have taken depositions on oath of several men, whose statements, tested by such means as are available, I am induced to believe, and they show that a few days after the raid Sikandar Khán, the brother, and Turabáz, cousin of

Háshim Alí, came into Agror by night and had a private interview with Fazl Ali in the fields near Shamdarra, at which the raid was discussed, and Fazl Ali gave to Turabáz some packets of cartridges for the Enfield rifle which the raiders had carried off. I am convinced that Fazl Ali will, as heretofore, intrigue actively to prevent the fulfilment of the immediate aim of Government. He is penetrated with the belief that his master's alliance with Háshim Ali Khán is the foundation of his importance, and may always be used to further his ambitious projects. He will neither do, nor permit the Khán of Agror, over whom he has complete control, to do anything tending to undermine Háshim Ali's prestige and power.

While he remains in Agror every difficulty that ingenuity can suggest will be put in the way of the return of the two prisoners in Seri, and attempts will be made to bring about a coalition in the hills to frustrate the aims of Government.

With a view therefore both to get back the two men kidnapped and to clear the way for the fulfilment of the objects expressed in the minute of His Honour the Lieutenant-Governor, I would earnestly request authority to summon Fazl Ali from Agror and to keep him in detention here, whenever such a step may appear necessary.

I have no doubt whatever that it would put an end to much criminal and treacherous intrigue, would immediately encourage and strengthen our own loyal subjects who are not in league with Háshim Ali, and would generally facilitate a settlement of the whole affair.

6. There is one other point to which I would invite attention which should have been noted in my letter of the 17th January.

Putting Abdulla Khán and the Chigharzai out of sight for the time, it will be found that much of the trouble on the border, and even within the valley, in the past ten years has arisen from the blood-feuds of the Hassanzai Khán Khels, which resulted in the exile of some members of the family who took refuge in the territory of the Nawáb of Amb, and much light will be thrown on the darkness of Agror affairs if the safety in which these men, the rivals and bitterest foes of Háshim Ali Khán, have lived in that territory, be compared with the utter insecurity of the lives of Háshim Ali's and Ali Gauhar Khán's enemies in Agror itself.

An account of the murders among the rival claimants to the chiefship of the Khán Khel will be found in Colonel Hastings' letter of 16th April 1883.

It is sufficient here to note that Ahmad Ali Khán, the late chief, was killed by Fíroz Khán and succeeded by his brother Háshim Ali, the present Khán. Fíroz Khán and his son Ibráhím took refuge in Shergarh in the territory of the Nawáb of Amb, which for some distance marches with and borders on the Hassanzai hills. Shergarh is as near to Seri and the Hassanzai country as is Kulakka, the scene of the raid in 1883, and much nearer than Ghanián, where the last outrage by Háshim Ali Khán was committed.

Here, however, Fíroz and Ibráhím have lived in perfect safety for years past. Háshim Ali Khán's ruffians have never attempted their lives nor violated the protection of the Nawáb's country; with this should be compared the facility with which he has wiped away his own enemies, more especially those who were also enemies of Ali Gauhar Khán, but who had the misfortune to live in Agror and within British territory.

Careful search would doubtless bring to light other examples; it will suffice to recite the following:—

(1.) 15th March 1880.—A band of Háshim Ali's servants came into Agror to kill Ghulám Kádir, Khán Khel, a partisan of the Fíroz Khán above-mentioned; they missed him, were surprised by some villagers, of whom they killed one Mansab of Belián.

(2.) 7th April 1880.—Another gang of Háshim Ali's men came into Agror intending to raid on Kulakka in order to kill two Swátís who were doubtfully supposed to have had a hand in the assassination of Háshim Ali's brother, and were connected by marriage with his murderer, Fíroz Khán, mentioned above. These men were cousins of Abdulla Khán of Dilbori and enemies of the Khán of Agror. Failing to find them, the Khán Khel gang on their way back murdered two British subjects.

(3.) 29th March 1883.—*The Kulakka raid.*—This I need not describe, beyond that in it Háshim Ali actually succeeded in killing the two Swátís mentioned under the last head, and this, too, in a village in the heart of Agror and close to the house of the Khán himself.

(4.) The recent raid on Odigraun, a village nearly at the furthest corner of Agror from the Hassanzai hills.

Besides these, in Colonel Hastings' report, above quoted, nine offences are said to have been committed by the Khán Khel on British subjects in Agror in 1879.

This shows that the Nawáb, whose country runs with the Hassanzai hills for a longer distance than our own border does, is strong and willing to protect the enemies of Háshim Ali Khán living within his jurisdiction, while others with whom Háshim Ali had no such bitter feud were hunted down and killed miles within the British border, almost at the threshold of the Khán of Agror's house.

It would be absurd to suppose that our territory is not, treachery apart, as safe an asylum as the hills of Tanáwal, and I venture to think that the only inference which can be drawn from the above comparison is that there has been treachery and connivance within our border, and that while the Nawáb of Amb has fully carried out his duty, as expressed by His Honour the Lieutenant-Governor in 1883, and has kept his border adjacent to the British frontier intact and inviolate, the door into Agror has always been left unlocked, and the Khán has used the Hassanzai to rid him of his personal enemies.

The correspondence of 1883 illustrates this in many places. Háshim Ali was used to denounce as displeasing to himself Ghulám Haidar Khán, elder brother and enemy of Ali Gauhar Khán, and Ghulám Haidar was exiled from Agror.

The outlawry of Abdulla Khán is upon his own head, but it is an open fact that he was exasperated into flight and into the commission of his first offence by the taunts and threats of Fazl Ali. Samundar and Muzaffar, Abdulla's cousins and opponents of the Khán, were disposed by the knives of the Khán Khel.

I do not believe that any Swáti in Agror expects much improvement or more security for the lives of those who in any way thwart the Khán so long as Fazl Ali remains there, and at the present juncture I am convinced that, in the interest of all the objects laid down in the minute by His Honour the Lieutenant-Governor, it is specially desirable that he should be speedily removed.

From Deputy Commissioner, Hazára, to the Commissioner and Superintendent, Pesháwar Division, dated 7th February 1888.

In continuation of my No. 244 C. of the 4th instant, I have the honour to forward a translation of a letter from Miyán Said of Parári to Fazl Ali Khán, agent of the Khán of Agror, which has come into my hands, and appears to me fully to corroborate the charges of intriguing to foment disturbances and to hinder the objects of Government which have been brought against Fazl Ali in the correspondence connected with the recent raid on Odigraun.

In this letter Miyán Said distinctly refers to his participation in the raid on Bagrián (July 1887) as having been at the instance of Fazl Ali, and makes reference to messages from Fazl Ali warning the writer not to come in to clear himself of that offence except through the intervention of Fazl Ali himself.

I have compared the writing and the seal on this paper, and find they agree exactly with those of petitions lately received from time to time by the Deputy Commissioner, and undoubtedly emanating from Miyán Said. I believe the letter to be a genuine one. It was found in the possession of Ahmed Ali Khán, who is brother of Fazl Ali, and frequently employed as his Munshi.

2. There appear to be only two theories on which the genuineness of this letter could be discredited:—

(1.) That while being a genuine letter of Miyán Said, it was fabricated by him with intent to bring Fazl Ali or the Khán of Agror into trouble.

(2.) That it has been forged in Agror.

The first theory can be at once proved untenable by the following considerations:—

(*a*.) It would not account for the paper being in the possession of Fazl Ali's brother, from whom it was abstracted by the man who brought it to me.

(*b*.) Miyán Said is notoriously a partisan of the Khán of Agror; he is betrothed to the Khán's sister, has for his sake thrown over Abdulla Khán of Dilbori, and there is no conceivable reason why he should seek to discredit Ali Gauhar Khán (see my report on the Bagrián raid, dated 3rd November, and my letter of 17th January paragraph 3).

3. I think the letter is genuine and not forged, both because of the identity of the seal and for the intrinsic evidence which the matter of the letter discloses:—

1st. Though Miyán Said was of course not personally present in the raid on Bagrián, Mr. Thorburn found and reported that his tenantry and followers were concerned in it.

Fazl Ali himself, in discussing the affairs with me, denied that Miyán Said was in any way implicated; but this denial can only be taken to show the friendship between them.

2nd. Miyán Said has, I know, for some time past been thinking of coming in with a jirga to defend himself or to settle the charge against him.

In paragraph 9 of my No. 80 C. of 14th January I reported that the Tikriwáls were collecting the money I demanded from them on account of ransom extorted from a Hindu of Mansahra kidnapped by three thieves from Tikri, and that Fazl Ali had intrigued to prevent their jirga from coming in with the money. Miyán Said, I know, was thinking of coming in with that jirga, and the latter part of the intercepted letter has doubtless reference to messages sent by Fazl Ali Khán to deter him.

4. This paper appears to me to corroborate the intrigues reported in paragraph 9 of my letter of 14th January, and taken together with the evidence of the meeting between Fazl Ali and the leaders of the Odigraun raid, described in paragraph 5 of my No. 244 C. of 4th instant, it seems to support the view that the time has already arrived when Fazl Ali should be removed from his present position, and that the condition under which His Honour the Lieutenant-Governor thought this step should be taken (paragraph 12 of his minute of 23rd January) has been fulfilled.

I can only say that while Fazl Ali remains in Agror it will be extremely difficult to carry out any plan to force the submission of Háshim Ali Khán or the realization of the demands of Government.

As reported before, I believe he instigated the late raid, and this intercepted letter goes to show that he abetted the one on Bagrián; this may be proved hereafter; meanwhile I submit that it is perfectly clear that he is encouraging and countenancing the detention of two British subjects beyond the border, and generally working against us in a way which seriously hinders my action as Deputy Commissioner in attempting to give effect to the wishes of Government.

Accordingly I ask permission to remove him from Agror and keep him in detention in Abbott-abád. Beyond mere political intrigues, proofs are accumulating which connect him with what are offences by the Penal Code—instigation or abetment of raids. If left at large anywhere in Hazára at the present time, he will give trouble. He should be called out to give heavy security under Section 39, Regulation IV., 1887.

I believe the news of his arrest and the knowledge that his intrigues have been unearthed would make it easy to isolate the Hassanzai from the Khán Khel and lead to the submission of Háshim Ali.

The Paráŕis would almost certainly sue for terms at the first sign that Government was determined to exact them.

The only hostile or troublesome faction among the Akazai are the hirelings of Agror, and if these three clans are once settled with, the Chigharzai must perforce abstain from troubling us, as their country does not abut on our border.

The one step which seems to me urgently necessary to pave the way to a healthy and satisfactory state of things is the arrest and detention of Fazl Ali Khán.

TRANSLATION.

To my kind and generous friend FAZL ALI KHÁN, Mukhtár of the Khán of Agror, from MIYÁN SAID.

AFTER GREETING.—You directed me to drive away and expel Abdulla Khán; according to your order I did so. Then you directed me to bring a raid against Sakhi Sháh of Bhagrián, and I obeyed your order. Then you instructed me not to submit to Government or make a settlement except with your permission. Sáhib, what is the object or advantage of forbidding me to make peace with Government? Let me understand the secret meaning of this. I wish to come to terms and make peace with Sarkár because I have not the power to fight against it.

Please give the bearer of this letter Rs. 4 worth of cotton, Rs. 3 worth of red cloth, and Rs. 3 worth of calico.

Dated 10th Jamadi-ul-awal, 1305.

True Translation,
F. D. CUNNINGHAM,
Deputy Commissioner.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 10th February 1888.

IN reply to your 244 C. of the 4th and 255 D. of the 7th instant, I have sent you the following telegrams:—

To the Deputy Commissioner, Hazára.

No. 38. Your 255 of seventh. It seems to me that you had better immediately summon the Khán of Agror with Fazl Ali, his agent, into Abbott-abad. Meanwhile my suggestions as to the action to be taken will reach you by letter.

No. 39. I do not mean by my telegram 38 of ninth that you have not full liberty of action as regards Fazl Ali to secure in any manner necessary his presence quickly in Abbott-abad.

2. You certainly have secured important evidence against Fazl Ali, and on his and the Khán of Agror's arrival in Abbott-abad it would seem advisable at once to separately examine each, carefully and fully, so as to elicit from them the explanation of many suspicious circumstances which are on record regarding each.

It must be left to your judgment to decide how much you can let them know of the evidence in your hands against them, having due regard to the safety of your informers.

You will of course act as you may think necessary in the matter of the removal from his position in Agror and detention in security either in Abbott-abad or elsewhere the agent Fazl Ali.

I should be inclined to let the Khán know at once that unless all suspicions can be absolutely cleared away, and this now seems impossible, it is not likely that Fazl Ali will ever be allowed to resume the position of his agent or even to return to his home in Agror, at all events for some time to come.

If this is not done, I am afraid that the Khán may, in his supposed complete dependence on Fazl Ali, build hopes upon such a possibility and be guided in his actions accordingly.

Much as I deplore this breaking down of our trust in the loyalty of the Khán of Agror, it will be most satisfactory if the disease is surely and immediately detected by you and some remedy can be applied which will provide for the future good management and peace of Agror.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated Lahore, 20th February 1888.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letter dated the 10th instant, forwarding further papers connected with the case of the raid on Odigraun on the Agror border.

2. It appears that the messages of the Lieutenant-Governor to the Khán of Agror, Háshim Ali Khán and the Hasanzai were despatched by the Deputy Commissioner on the 28th of January. So far no replies have come. There is at present snow on the Black Mountain, and no probability of a raid in force on Agror for some time.

3. In view of the further evidence which has been obtained tending to connect Fazl Ali, the agent of the Khán, with the Odigraun raid, you have directed the Deputy Commissioner to summon the Khán with Fazl Ali to Abbott-abad and to separately examine each of them in reference to the circumstances which give rise to suspicions against them. You have also authorized the Deputy Commissioner to act as he thinks necessary as regards removing Fazl Ali from his position in Agror and detaining him in security either at Abbott-abad or elsewhere.

4. In reply, I am to say that the instructions to the Deputy Commissioner contained in your letter, dated the 10th instant, are approved by the Lieutenant-Governor.

ENCLOSURE No. 9.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated 24th February 1888.

IN continuation of the correspondence ending with Mr. Young's letter dated 19th December 1887, regarding the participation of Abdulla Khán of Dilbori in the raid on Bágrián which was made by the Chigarzai tenants of the Parári Sayads in July 1887, I am directed by the Lieutenant-Governor to forward, for the information of the Government of India, a copy of the correspondence marginally noted, which gives further information as to the alleged part taken by Abdulla Khán in the Bágrián raid, and also as to the attitude of the Parári Sayads and Chigarzaís as exhibited by further facts which have now been communicated for the first time to the Lieutenant-Governor.

1. Commissioner's No. 685 of 11th February 1888.
2. Punjab Government's No. 38 C. of 17th February 1888.
3. Commissioner's No. 726 of 13th February 1888.
4. Commissioner's No. 728 of 13th February 1888.
5. Commissioner's No. 817 of 18th February 1888.
6. Commissioner's No. 832 of 20th February 1888.

With enclosures of all.

7. Punjab Government's letter No. 92, of to-day's date.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the OFFICIATING SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 11th February 1888.

WITH reference to your No. 516 of the 19th December, conveying the orders of His Honour the Lieutenant-Governor in the case of the raid on Bágrián on the 11th July last in which correspondence the instigator of the raid is concluded to be Abdulla of Dilbori, the absconded criminal, and his

brother with certain Chigarzai and Parári Sayads. I have the honour to forward a copy of my No. 684 P., dated 11th February, to the Deputy Commissioner, Hazára, and to draw attention to the fact that there are now suspicions that this raid may have been instigated by the agent of the Khán of Agror, rather than by Abdulla of Dilbori. The matter requires clearing up.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 11th February 1888.

MY No. 5,956 of the 25th December conveyed to you a copy of Secretary to Government, Punjab's No. 516 of the 19th December in the matter of the raid on Bágrián in Agror on the 11th July last. I am waiting for your report upon the action taken on the instructions of His Honour the Lieutenant-Governor.

2. In that letter the Lieutenant-Governor has accepted your views and those of your predecessor expressed in the correspondence that participation in this raïd on Bágrián was clearly established against Abdulla of Dilbori, the absconded offender, and his brother and their Chigarzai and Parári Sayad allies.

In consequence the son of Abdulla was to be sent from the Abbott-abad school across the border, and an opinion was called for whether retaliatory measures should not be undertaken by the Government against the offenders. I am awaiting your report upon the above communication.

3. Meanwhile I have received, in the case of the raid by Háshim Ali Khán on Odigraun on the 11th January, your No. 255 C. of the 7th instant, from which it might be concluded that this raid on Bágrián above alluded to was instigated by the Khán of Agror or his agent, Fazl Ali, and of course not by Abdulla of Dilbori and his brothers. As the two parties are bitterly opposed to each other, one of the two theories must be incorrect. This matter will require clearing up, and perhaps the action directed by His Honour the Lieutenant-Governor in his Secretary's No. 516, of the 19th December should not be taken pending further enquiry. You should report as quickly as possible what you now propose doing in the matter of the Bágrián raid of which Abdulla of Dilbori has been judged guilty.

4. I would also add for your consideration certain other matters as regards this raid on Bágrián. Mián Sayad, a partizan of the Khán of Agror, could scarcely have joined Abdulla of Dilbori in a raid. Rahím Khán of Malhal is perhaps also said to have joined in this raid. He, too, is opposed to Abdulla of Dilbori, and the wife of his brother and the mother of the Khán of Agror are sister's daughters of the late Hassan Ali Khán, Khán Khel Hassanzai. Rahím Khán and Abdulla of Dilbori could scarcely have been found engaged in the same raid. Perhaps, too, Abdulla had scarcely the influence to bring about a raid in which he could not have personally assisted.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 17th February 1888.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letter, dated the 11th instant, forwarding copy of a letter which you have addressed to the Deputy Commissioner of Hazára in connection with the raid on Odigraun in Agror which occurred on the 11th July last.

2. The Lieutenant-Governor agrees in your opinion that in view of the circumstances which appear to connect Fazl Ali, agent of the Khán of Agror, with this raid, the question of the complicity of Abdulla Khán in the outrage requires further investigation.

3. You will no doubt report fully on the subject when you have received a reply from the Deputy Commissioner.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the OFFICIATING SECRETARY to GOVERNMENT, Punjab, dated 13th February 1888.

I HAVE the honour to forward, for the information of Government, copies of the marginally-noted correspondence respecting the murder of one Núr Jamál by a party of Chigarzai tenants of the Parári Sayads, and the manner in which the Deputy Commissioner proposes to deal with the case.

Deputy Commissioner, Hazára's No. 598 of 26th August.
Deputy Commissioner, Hazára's No. 4207 of 9th November.
Extract paragraph 2 of Deputy Commissioner, Hazára's No. 4296 of 19th November.

Mr. Thorburn proposed to detain the hostages in jail pending the settlement of the case, and Mr. Cunningham proposes in his subsequent letter to take a fine of Rs. 500 in addition from the Parári Sayads or their Chigarzai tenants, and to realize the same by reprisal and seizure of these people or their property whenever the opportunity offers.

As the case is not advancing towards settlement, I advise that this proposal of Mr. Cunningham be sanctioned under Section 23 of the Punjab Frontier Crimes Regulation, 1887.

Should the detention of the Parári Sayad hostages in jail appear to the Deputy Commissioner, Hazára, advisable or necessary, he should apply within three months for their further detention as political prisoners under the Act.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 26th August 1887.

ON the morning of the 21st instant Núr Jamál of Ghanián, Agror, whilst watching his makai crop, was shot at and killed by two or three men, who crept down and stalked him. Rahmat-ulla, Deputy Inspector, went to the spot and ascertained that a party of armed Chigarzaís had been on the look-out above the scene of the murder and had applauded the deed of two or three of their comrades. The party belonged to the Chigarzai tenants of the Parári Sayads. As those Sayads have two hostages here (Abbott-abad), and as this is the second offence recently committed by their Chigarzai tenants, I have put both hostages into jail and written to the Sayads informing them that until they clear themselves of the charges against their Chigarzai tenants their hostages will be detained in jail.

2. I may add that the Deputy Inspector's report is confirmed by one from the Khán of Agror, and that the deceased Núr Jamál had no personal enemies.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 9th November 1887.

YOUR reminder No. 5123 of 5th instant calls attention and asks for a reply to a letter from this office, of 26th August, in which Mr. Thorburn reported the death of one Núr Jamál, who was shot by some Chigarzai tenants or dependants of the Parári Sayads. The Sayads, on being charged with this, denied their responsibility, but it appears clear that the offence was committed by "hamsáyas" or dependants of theirs, for whom they must be held to account. The only cause that can be ascribed for this offence is a desire to commit some act of hostility against Government, and possibly bring trouble on the Khán of Agror.

EXTRACT PARAGRAPH 2 of LETTER from DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 19th November 1887.

I PROPOSE to hold the Parári Sayads responsible, as explained in Mr. Thorburn's letter, of 26th August, to recover a fine of Rs. 500 when opportunity offers by "baramta" or seizure of cattle belonging to them or to their Chigarzai tenants (hamsáyas), and until they pay up, or until the amount is

made good out of property seized, detain their hostages in jail. I do not think a "baramta" can be easily made till the spring, when their cattle may graze on the Agror border, and the Khán of Agror will not be willing to seize, or will have some natural difficulty in seizing, property of those Sayads or of the followers and tenants of those Sayads who belong to his faction and party.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 13th February 1888.

WITH reference to paragraph 6, clause 2, of my No. 5151 of 20th October 1885, to your address, and paragraph 6 and Appendix B. of its enclosures at pages 9—13 and 15 of printed Proceedings for November 1885, showing that two hostages were taken each from the Chigarzai and Parári Sayads in connection with disturbances in Agror, I have the honour to forward for the information of Government copies of the following correspondence :—

Commissioner's No. 5305 of 14th November.
Paragraph 1, Deputy Commissioner, Hazára's No. 4296 of 19th November.
Extract from Commissioner's No. 5848 of 19th December to Deputy Commissioner, Hazára.
Extract from Deputy Commissioner, Hazára's No. 4587 of 22nd December, paragraphs 3 and 4.

These relate to the absconding from Abbott-abad of the two Chigarzai hostages in August and September last. I suggest, as proposed in paragraph 4 of the Deputy Commissioner, Hazára's No. 4587 of 22nd October, and in my No. 726 of this date, that the two Parári Sayads be still detained in jail pending a settlement of the Núr Jamál murder case, and that no further attempt need be made to replace the two Chigarzai hostages.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 14th November 1887.

WITH reference to Deputy Commissioner's No. 4207, dated 9th instant, enquires if the Chigarzai hostages are still in jail, or whether they have been released, and when; also how the Deputy Commissioner proposes to hold the Parári Sayads responsible, and to deal with the matter.

EXTRACT of PARAGRAPH 1 of the LETTER No. 4296 of 19th November 1887, from F. D. CUNNINGHAM, Esquire, C.I.E., Deputy Commissioner, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division.

IN reply to your No. 5305 of 14th instant, I have the honour to state that there are no Chigarzai hostages here. There used to be two; one took leave in August and did not return, the second went off without leave—in other words, ran away—in September. The Deputy Commissioner wrote to Kudra Khán, Chigarzai, to send substitutes, but received no reply.

EXTRACT from PARAGRAPH 2 of a DOCKET No. 5848 of 19th December 1887, from COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára.

WHAT communication has been held with the Chigarzaís regarding the conduct of their hostages? What has become of the two hostages given by the Parári Sayads, and what do you advise should now be done in the matter of those four hostages?

EXTRACT of PARAGRAPHS 3 and 4 from a LETTER, dated 22nd December 1887, from DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division.

PARA. 3. I may here repeat that one of the Chigarzai hostages on pretext of leave went in August, the other departed without leave on 3rd September, nearly a month before I took charge of the district, and I have reported all I know or can ascertain on the matter. No communication has been had with the Chigarzai, but, as already reported to you, Mr. Thorburn wrote to the Chigarzai Maliks to ask for a substitute; they made no reply.

PARA. 4. In reply to the concluding question in your No. 5,848, I have the honour to say that I think all four hostages should for the present be left where they are—the Chigarzai in their own hills, the Paráris in jail.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the OFFICIATING SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 18th February 1888.

MY No. 685 of the 11th instant to your address forwarded a copy of my No. 684 of the same date to the Deputy Commissioner, Hazára, calling for the report asked for by His Honour the Lieutenant-Governor in your No. 516 of the 19th December, and pointing out that if, as had been subsequently suggested in Deputy Commissioner's No. 255 C. of the 7th instant, in the Odígraun raid case of the 9th January, the Khán of Agror or his agent had instigated the Bágrián raid of the 11th July, it was improbable that Abdulla of Dilbori and his brother, the bitter enemies of the Khán of Agror, should have been present at and participated in the same raid; also that Mián Sayad of the Parári Glen and Rahím Khán of Charmang were not likely to be found acting in concert with Abdulla of Dilbori.

2. I now forward in original the Deputy Commissioner, Hazára's No. 301 of the 15th instant to my address, showing cause why both theories may possibly be correct.

The Deputy Commissioner reports the action being taken on your No. 516 of the 19th December.

The son of Abdulla of Dilbori will be sent back to the independent territory with Ghaffár Khán of Trund, his maternal grandfather.

3. It is proposed, and I think rightly, that the measures to be taken to exact reparation for this raid and punishment of the offenders should be considered after Government has decided how it may have to deal with the Khán Khel Hassanzai and Háshim Ali Khán for the Odigraun raid of 9th January 1888.

4. As to whether the Khán of Agror should be called to account for remissness or worse in the matter of this raid, he is now suspected of having instigated the raid, and I have therefore in my No. 50 C. of the 17th advised that the Khán be summoned to Abbott-abad from Agror, and that it be considered whether he shall not be distinctly charged with certain offences of which this will of course be one.

5. On the question of whether Abdulla of Dilbori and his brother could have been participators in a raid planned by the Khán of Agror and carried out by Mián Sayad of Parári and Rahím Khán of Charmang, the Deputy Commissioner enters fully in paragraph 4 of his letter.

By the light of subsequent discoveries I think that the Deputy Commissioner may be held to have made out a sufficient case why we may hold, until we have evidence to the contrary, that the raid on Bágrián on the 11th July was not improbably instigated by the Khán of Agror, but yet that brothers of Abdulla of Dilbori, and perhaps that outlaw himself, may have been engaged therein is a fact already accepted by His Honour the Lieutenant-Governor in the previous correspondence. There is therefore no reason why the orders of the Lieutenant-Governor in that case should not be given complete effect to at once, and the Deputy Commissioner is informed accordingly.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 15th February 1888.

I HAVE the honour to acknowledge receipt of your No. 684 P. of 11th instant, stating that you await a report as to the action taken on the letter from Secretary to Government, Punjab, No. 516 of 19th December, and ask for explanation on certain points connected with the responsibility for the raid on Bágrián on 11th July 1887, with special reference to the matter reported in my letter of 7th instant.

2. The letter of 19th December, above quoted, conveying the orders of His Honour the Lieutenant-Governor on the Bágrián case directed—

(*i.*) That Amín Khán should be sent to rejoin his father, as his detention seemed of small use as security for Abdulla Khán's conduct;

(*ii.*) That the necessity of measures to secure the punishment of the offenders should be considered.

In addition to the above your forwarding letter directed me—

(*iii.*) To furnish a report as to the general question of the behaviour of the Khán of Agror;

(*iv.*) To give an explanation of the disappearance of the Chigarzai hostages.

Before discussing the further points noted in your letter of 11th instant, I will, for clearness sake, deal separately with the questions above detailed.

3. *First.* The dismissal of Amín Khán. This could not be carried out immediately on receipt of the order. No trustworthy man was then available to be sent with the lad and see him safely to his father, who is far away in the heart of the Chigarzai country. Moreover, I was expecting the arrival from Tikri of a jirga with Abdul Ghafár Khán of Trund, who is maternal grandfather of Amín Khán, and could be safely entrusted with the boy. This jirga is coming in to pay up a fine which I imposed on account of ransom extorted from a Hindu who was kidnapped by three thieves from Tikri:* but for the intrigues of the Khán of Agror, as reported in my No. 4,489 of 13th December, the jirga would have been in ere this. They are on their way now, and when they arrive I will make over Amín Khán to Abdul Ghafár Khán with a letter to Abdulla Khán containing the orders of His Honour the Lieutenant-Governor.

* See my No. 4489 of 13th December 1887.

Second. Punishment of the Paráris and Tikriwáls. The measures required to secure this result must depend so much on the steps taken to deal with the more recent and graver offences of the Khán Khel Hasanzai that at present it is difficult to offer any opinion on the matter.

The people responsible are—

(1.) Sayards and Chigarzaís of Parári;
(2.) Rahím Khán of Chirmang; and
(3.) Abdul Ghafár Khán,

for the part taken in raid by their tenantry or dependants.

If Government takes any strong measures against the Khán Khel, we may be sure that Parári and Tikri will hasten to submit to any reasonable terms. The mere belief that a force was going to assemble,—in fact the appearance of two regiments in Agror,—would determine them to prompt repentance and complete humiliation.

Third. The attitude and conduct of the Khán. This subject has been dealt with at such length in the correspondence on the arrest of Turabáz and the raid on Odigraun (9th January) that it will perhaps be unnecessary to add more here.

With my letter of 7th instant I submitted a paper, of the genuineness of which I have no doubt whatever, proving that the Khán abetted and connived at the Bágrián raid, and since the Odigraun affair much has come to light and has been reported showing that the Khán and his agent have throughout worked entirely in the interests of Háshim Ali Khán to effect the release of Turabáz; that they instigated and assisted the attack on Odigraun (9th January); that they have since been in friendly communication with the Khán Khel chief and his followers; and I can adduce further proof,

which I believe will carry conviction, showing that Ali Gouhar Khán and Fazl Ali have not only worked to prevent the release by Háshim Ali Khán of the two prisoners captured in the last raid, but that they have been persistently urging him to commit another.

At present it is impossible for me to show Ali Gouhar Khán exactly what I know of his doings. It would hazard the life of one of my informers. Hereafter it may be done, and his answer or defence will be reported in due course, if indeed it be not made by him in person in Lahore.

Fourth. As to the disappearance of the Chigarzai hostages. I would refer you to my letter of 22nd December 1887, which states all that is known as to their departure. One took leave and did not return. The other departed, as Mr. Thorburn expressed it, without going through the formality of taking leave. This happened before I came to the district. When making over charge Mr. Thorburn mentioned to me that he had reported it to you.

4. I come now to the question of Abdulla Khán's connection with the Bágrián raid and the other points noted in your letter of 11th instant.

Matters which have come to light in the enquiry into the raid on Odigraun, more especially the production of the letter described in my No. 255 C. of 7th instant, show clearly that the Khán connived at and instigated the earlier raid on Bágrián, 11th July.

When my opinion was asked on the matter it was not easy to form an independent judgment on events which had occurred some months before. I had suspicions that the Khán knew much more about it than he cared to admit; but as they were only suspicions, I kept them to myself and reported what appeared capable of proof, namely, that he had been remiss and negligent.

I may now mention that from the file of reports and enquiries connected with the Bágrián raid it is clear that Sakhi Shah at once openly accused the Khán of having brought the raid about to injure him, and he advanced two arguments in support of the charge:—

(*i.*) That up till a day or two before the raid the cattle of Ghani Khán of Bágrián had been grazing on the same hill-side with Sakhi Shah's. This Ghani Khán is a relative of the Khán, and of late has been dependent on his richer cousin's bounty, and is friendly with him. Ghani Khán's cattle were suddenly withdrawn to graze elsewhere; immediately afterwards the raiders came down and carried off Sakhi Shah's herd.

(*ii.*) That on the day before the raid took place a servant of one of the Tikri Kháns, whose followers were in the affair, came to Agror to his brother who is in the service of the Khán.

The inference from these two facts is that early news was sent to the Khán of the time, and that he arranged the place so that only his enemy Sakhi Shah should suffer. This man Sakhi Shah is, I may remark in passing, son of Pír Ali Shah, and holds certificates given by you as Deputy Commissioner testifying to his father's services, and stating that he must be supported against the Khán of Agror, who hated him *for the services which he had done for Government.*

Viewed by the light afforded by the intercepted letter from Mián Said of Parári, my earlier suspicions became conviction, and I have no doubt left that Ali Gouhar Khán did instigate the Bágrián raid; that he knew when and where to expect it, and arranged matters so that it should injure only his enemy Sakhi Shah, put Abdulla Khan into still deeper disgrace, and be generally useful for his own objects as an argument that he required more money and more rifles "for the defence of his border." Now as to Abdulla Khán. I see nothing inconceivable in his and his brother's presence in a raid which, if not actually originated by his enemy, was known to and countenanced by the Khán of Agror.

The betrothal of the Khán's sister to Mián Said, and the fact that the Khán still had with him the girl for whom Mián Said was becoming impatient, gave Ali Gouhar Khán a great hold over the Sayad, whom he could easily influence to get up a raid in which the Khán's enemies in Agror should suffer, while his own name should be concealed. Abdulla very possibly did not know of this. In any case he was then living as a refugee in Parári, and

if the tenantry of his protector and host, Mián Said, and the other Sayads were to make a raid he must perforce join in it.

At the same time, in my report on the matter I did not go further than say that his brothers were present and that he came up later in time to join in the fight which ensued (*see* end of paragraph 4 of my letter of 3rd November 1887). I think there is nothing more likely than that the Khán, if he wished to get up a raid, or if he knew one was likely to take place, would arrange so that the leading men in Parári should associate Abdulla Khán and his brothers in the affair, and that it should then be directed against the Khán's own enemies.

Fazl Ali, the moving spirit in Agror, is remarkably proficient in killing two birds with one stone, and Abdulla Khán, whose rôle as a man with grievance against Government almost necessitates his joining in any adventure of the kind, would easily fall into the snare.

But even if it were held that Abdulla's brothers would join nor aid of which the Khán had cognizance, this does not greatly affect the ground on which it appears that His Honour the Lieutenant-Governor directed the boy Amín Khán should be sent back to his father. Whether or not Abdulla and his brothers joined in the Parári raid on Bágrián, it can be proved that in the subsequent case of the kidnapping of Jowáhir, a bunya of Mansrah, from the neighbourhood of Garhi Habibulla, the outlaw's brothers were acting in concert with the robbers and met them near the border as they were returning from their expedition with the captive Hindu.

5. I have lastly to notice the question whether Rahím Khán of Chirmang could have been associated in a raid in which Abdulla Khán of Dilbori was concerned.

It is true that Rahím Khán is connected with, and generally in alliance with, the Khán of Agror, and therefore not in sympathy with Abdulla Khán: moreover, in Tikri, Rahím Khán is a bitter enemy of Abdul Ghafár Khán of Trund, whose daughter is married to Abdulla Khán. But I would point out it is nowhere alleged that Rahím Khán himself joined in the raid. He probably allowed his servants to take part in it for the same reasons as Mián Said, viz., that both are partizans of the Khán of Agror and acted under his influence. It is almost certain that some servants and followers of Abdul Ghafár Khán of Trund were concerned in it, and the explanation is that these joined for plunder, without caring much for the fact that they were associated with the followers of their chief's enemy and rival, Rahím Khán.

The presence of Abdulla Khán and his brothers in association with the servants of Rahím Khan is explicable by their readiness to join in any act of hostility to Government. Abdulla may also have acted at the suggestion of Mián Said, whose hospitality he had enjoyed, and who was only subsequently forced by the stronger hold which the Khán of Agror had over him to act openly against Abdulla and send him out of Parári.

Various motives no doubt actuated the parties concerned, but the hope of the Khán throughout was to play off one enemy against the other, to use a rabble from Parári and Tikri to attack Sakhi Shah, while under cover of the name of Abdulla Khán he himself would escape suspicion and point hereafter to another frontier trouble and to more "border service."

Under these circumstances I think there is no reason to defer carrying out the order of His Honour the Lieutenant-Governor regarding Amín Khán, whom I propose to make over to Abdul Ghafár Khán of Trund when the Tikri jirga arrives to pay up the fine in the Hindu kidnapping case. This jirga is expected in a couple of days. They are reported to have reached Battal.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the OFFICIATING SECRETARY to GOVERNMENT, Punjab, dated 20th February 1888.

WITH reference to Secretary's No. 38 C. of the 17th, the Commissioner's No. 817 of the 18th is probably a sufficient reply, and Abdulla Khán remains charged with having joined in the raid on Bágrián, and it will be for him to plead not guilty.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated Lahore, 24th February 1888.

I AM directed by the Lieutenant-Governor to acknowledge the receipt of your four letters marginally noted, regarding the participation of Abdulla Khán of Dilbori in the raid committed on Bágrián in July 1887, and the behaviour of the Parári Sayads and Chigarzaís.

Dated 13th February, 18th February, and 20th February 1888.

2. From these communications it appears that in addition to the raid on Bágrián the Chigarzai tenants of the Parári Sayads are responsible for the murder, in August last, of Núr Jamál of Ghanián, and further it is reported that one of the two Chigarzai hostages, who were given after the submission of the tribe at the close of the year 1885, left British territory in August last on pretence of taking leave, and that the second departed on 3rd September without permission of any kind.

3. For the murder of Núr Jamál you recommend in your letter of 13th February that a fine of Rs. 500 be imposed on the Parári Sayads or their Chigarzai tenants, but in paragraph 3 of your later communication of 18th February you propose that measures for exacting reparation for the raid on Bágrián should not be considered until Government has decided how it will deal with the Khán Khel Hasanzaís for the Udigraon raid of 9th January, which has formed the subject of separate correspondence.

4. I have laid your letters before the Lieutenant-Governor, who desires me to make the following remarks. Regarding satisfaction for the raid on Bágrián, measures of retaliation have been confined, so far, to the announcement of a "baramta" or reprisals against the persons or property of the Parári Sayads or their Chigarzai dependants, in accordance with the instructions contained in paragraph 5 of Mr. Young's letter, dated 19th December 1887. This measure practically amounts to a blockade, and Mr. Lyall agrees with you that further action need not be taken till it has been decided how to deal with the Khán Khel Hasanzaís and Háshim Ali Khán.

5. The Lieutenant-Governor also approves of the proposed fine of Rs. 500 for the murder of Núr Jamál. If this is recovered by "baramta" as suggested, the measure will not conflict with the orders previously given regarding the treatment of the Parári Sayads and Chigarzaís. But I am to remark that the murder ought certainly to have been reported to Government at the time of its occurrence according to the instructions contained in C. Circular No. 15-240, dated 26th February 1872. You were aware that the raid on Bágrián was under the consideration of the Lieutenant-Governor, and you also knew that the murder had not been committed from private reasons, but as an intended blow at the British Government, and you should not have left the Lieutenant-Governor to deal with the Bágrián question without knowledge of the subsequent outrage on Núr Jamál.

6. Similarly, the disappearance of the Chigarzai hostages has been unfortunate, and is doubtless connected with the raid on Bágrián and the murder of Núr Jamál. The occurrence of these outrages in all probability made the hostages feel uneasy, and after their departure it is not surprising that the Chigarzai headman thought it discreet to return no answer to Mr. Thorburn's civil request that other hostages might be substituted. But the Lieutenant-Governor thinks that it is surprising that Mr. Thorburn did not keep a tight hold upon the hostages as soon as he learned the renewal of outrages at the hands of the Chigarzaís, instead of granting to one leave of absence, and permitting the other to run away. Hostages so treated must be valueless, and measures should be adopted to prevent the escape of the remaining Parári hostages, if necessary, by their incarceration in the jail.

7. With reference to the complicity of Abdulla Khán and his brother in the raid on Bágrián, the Lieutenant-Governor agrees with you that their participation is quite compatible with the alleged instigation of that outrage

by the Khán of Agror and his agent, Fazl Ali Shah, and therefore the carrying out of the orders for the return to independent territory of Abdulla Khán's son is unobjectionable.

ENCLOSURE No. 10.

TELEGRAM from PUNJAB SECRETARY, Lahore, to FOREIGN SECRETARY, Calcutta, dated 25th February 1888.

REFERENCE my No. 76, dated 20th instant. Fazl Ali now detained at Abbott-abad. Some Hassanzai Maliks have sent somewhat defiant answer. No answer from Háshim Ali. Reply of Khán of Agror unsatisfactory, and there is now evidence believed by Deputy Commissioner that the Khán has been inciting Háshim Ali to make another raid and to compass the murder of the Deputy Inspector who arrested Turabáz. Khán has been summoned to Abbott-abad for explanations. May be necessary to prosecute him and Fazl Ali criminally. Letter follows.

ENCLOSURE No. 11.

From OFFICIATING SECRETARY to the GOVERNMENT of the PUNJAB, to the SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 28th February 1888.

IN continuation of my letter, dated 7th February 1888, I am directed by the Lieutenant-Governor to forward, for the information of the Government of India, a copy of the papers marginally noted, which contain further information regarding the kidnapping of Jowáhir, a Khatri of Mansehra, in the Hazára District, and also report the commission of a similar offence in regard to another Khatri, named Sawan.

Commissioner of Pesháwar's No. 717, dated the 13th February 1888, and enclosures.

2. The kidnapping of both these men occurred on the metalled trunk road which runs from Hasan Abdal on the North-Western Railway, through Abbott-abad and Mansehra, to Garhi Habibulla, and thence proceeds to Muzaffarabad in Kashmir territory. At no point is this road in proximity to the British frontier, and the kidnappers of Jowáhir and Sawan must have conveyed their prisoners through more than twenty miles of our territory before reaching the border. These particulars, the Lieutenant-Governor considers, confirm the view expressed in paragraph 4 of my letter above cited regarding the insolence of the tribes on the borders of the district of Hazára.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to the GOVERNMENT of the PUNJAB, dated 13th February 1888.

WITH reference to his No. 10 C., dated 7th instant, and enclosure, has the honour to forward, for information, a copy of the Commissioner's No. 716 P. of this date to the Deputy Commissioner, Hazára, together with copies of the Deputy Commissioner's No. 4373 of 29th November 1887 and No. 4489 of 13th December 1887.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER of Hazára, dated 13th February 1888.

IN continuation of my No. 5895 of 21st December, a copy of which was sent to Punjab Government by Commissioner's No. 2 P. of 3rd January, for sanction to arrest and detain members of the Tikri Swathi tribe, forwards three printed copies of Punjab Government reply of 7th instant, and

enclosure, with request that anything further of importance should be communicated for the information of the Government.

2. Adds that copies of his No. 4373 of 29th November and No. 4489 of 13th December are now being sent to Punjab for information.

From DEPUTY COMMISSIONER of Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 29th November 1887.

I BEG to report that a Khatri, named Sawan, was carried off from "Batrasi" about half-way between Mansehra and Garhi Habibulla on the 16th instant by three men whom he states to have been Ali, Ghaffár, and Nurgul. He was conveyed to Diwan in Tikri and kept there till the 23rd instant when he was released on the intervention of a jirga. A further report regarding his release, &c., is awaited from the Tahsíldár, Mansehra.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 13th December 1887.

IN continuation of my No. 4373 of 29th ultimo, I have the honour to make the following report as to the kidnapping of Jowáhir Khatri of Mansehra. This man was on his way from Mansehra to Garhi Habibulla on the 16th November 1887 to settle up accounts with Samunder Khán of Garhi Habibulla. He had reached Batrasi, about 5 or 6 miles from Garhi, in the afternoon, when he was set upon by three men, Ali Khán, Ghaffár, and Nurgul. They made him dismount from his mare and carried him off into the forest; Nurgul led the mare away by the road, the other two took the Hindu off by by-paths across country in the evening and through the night by Dudyal and Battal to the border. On the way they were joined by Nurgul with the mare; and at Jangali, a hill near the border, they were met by Muhammad Khán and Jalal Khán, brothers, and Lal Khán, son-in-law of Ali Khán; thence they went by the Kathaigali and the Kabal hill to Dharyan in Tikri, where Ali Khán and the others live, and arrived there on the night of the 17th. News of this reached Battal on the 18th, and a man was sent to enquire. He returned with a messenger from Nawab Khán of Dharyan, carrying a letter for Ditta, Khatri of Battal, relative of Jowáhir, who stated that his captors demanded Rs. 800 for his release, and as he was in fear of being carried off to Parári or Chigharsai Kalish he begged Ditta to send the money. The Inspector of Police happened to come to Battal on the 19th, saw the letter, and told Barham Khán and the other Maliks of Battal to go to Dharyan at once and get back the Hindu. They started on the 20th. Meanwhile, the Tahsíldár, on hearing of the affair, sent off Jumma Khán of Mansehra and the son of Akbar Khán of Gidarpur with the same object; they reached Dharyan on 21st.

Meanwhile, Molak, Hindu, of Phagora Nindhar, a relative of Jowáhir, with Jamal Akhinzada arrived, and the usual negotiation and jirga work began. Jowáhir was in the hands of the Naror section of Tikri Swathis, but was apparently made over to the Malkal jirga; eventually on the 23rd he was released. The Swathi Maliks of Battal and Mansehra pretended ignorance of any ransom having been paid, and Jowáhir has been so far schooled that he states they told him not to pay a farthing but to trust to them. There is not the slightest doubt that Jowáhir's relatives paid Rs. 650 through Molak, Hindu, of Phagora, and it is morally certain that the Kháns of Battal, &c., knew this. The mare and the Hindu's books were restored to him. He alleges that property worth Rs. 142, including personal ornaments, Rs. 30 cash, and 4 tolahs of gold worth Rs. 80, was detained. The Swathi Kháns say that Jowáhir at first mentioned only his personal ornaments and clothes valued at Rs. 32. This matter awaits further enquiry. At present I am inclined to believe the Hindu's statements. As to payment of ransom, though it is unfortunate that any was got out of the Hindu, still it is not astonishing that he should implore his relations to send the money. Abdulla Khán's brother, Ghazi Khán, appeared on the scene

and the captors talked of removing Jowáhir to Kalish, whence it would have been difficult to secure his return by "barampta."

2. I have directed the arrest and detention of any man of the Naror and Malkal sections of Tikriwáls, and expect shortly to recover the full amount of the ransom paid. Nawab Khán of Dharyan (Ashlor) is son-in-law of Ghaffár Khán of Trund, but of late has quarrelled with him. Ali Khán is a notorious ruffian and robber. The latest report says that from fear of pressure being put on him in Tikri he has gone to Abdulla Khán in the Chigharsai hills. Several Tikriwáls have been caught, aud there is no reason to suppose there will be much difficulty in settling the matter.

So far it is not clear that Nawab Khán had anything to do with the matter, but all the sections in Dharyan probably shared in the ransom, though of course the bulk went to the Narors and to Ali Khán's family.

ENCLOSURE No. 12.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 25th February 1888.

IN continuation of my telegram of this date, I am desired by the Lieutenant-Governor to forward the further papers noted in the margin, relative to the present situation on the Agror border.

Commissioner Pesháwar's No. 49, dated 16th February 1888.
Commissioner, Pesháwar's No. 50 C., dated 17th February 1888, and enclosures.
Commissioner, Pesháwar's No. 52 C., dated 18th February 1888, and enclosures.
Punjab Government's reply No. 96, dated 25th February 1888.

2. The position has been described in my telegram and letter, both of this date, addressed respectively to you and to the Commissioner of Pesháwar.

3. The Lieutenant-Governor hopes that the instructions which he has given to the Commissioner of Pesháwar will be approved by the Government of India.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 26th January 1888.

IN continuation of No. 24 C. of 23rd instant, I have the honour to forward for information a copy of my No. 33 C. of this date, to the Deputy Commissioner, Hazára, in reply to his No. 139 of the 24th instant, which is herewith forwarded in original, regarding the case of Turabáz.

TELEGRAM from COMMISSIONER, Pesháwar, to DEPUTY COMMISSIONER, Hazára, dated 31st January 1888.

No. 31. Punjab telegraph. *Begins.* "Your No. 34 C. dated 26th January. Lieutenant-Governor agrees with Deputy Commissioner and yourself that the responsibility of the Hassanzai should not be asserted in such a way as to alarm or impel the tribe to make common cause with Háshim Ali. If the Deputy Commissioner thinks it advisable, he may modify the Lieutenant-Governor's message to Hassanzai, so as to avoid alarming them." *Ends.* Act accordingly and report.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 17th February 1888.

A COPY of my No. 1 of the 10th instant, to the Deputy Commissioner, Hazára, was duly forwarded to you under cover of my No. 2 of the same date.

I have now the honour to forward in original the Deputy Commissioner, Hazára's No. 310 of the 16th instant.

2. Fazl Ali, the agent of the Khán of Agror, is now in detention in Abbott-abad.

No reply had been received by the Deputy Commissioner up to date from the Hassanzai or from Háshim Ali Khán. The Khán of Agror is believed to have done nothing to effect the return of the two persons kidnapped from Agror in the Odigraur raid.

The Deputy Commissioner advises that the Khán himself should not be allowed to remain any longer in Agror, but should be removed either by the Deputy Commissioner summoning him to Abbott-abad or ordering him to Lahore. In reply to this I have advised the Deputy Commissioner by telegraph and by forwarding him a copy of this letter that he may, as suggested in my telegram No. 38 of the 9th instant, summon the Khán of Agror at once to Abbott-abad whence he can be directed to report himself at Lahore if His Honour deems it advisable. From the Deputy Commissioner's letter it would seem that this removal of the Khán may prevent further bloodshed in Agror.

3. As regards the Tahsíldár of Mansehra, Shahzáda Mahsúd, I have sent for his roll. It would not, I think, be advisable to employ him again either in Kohát or Pesháwar, where there are other members of his family in Government service as Extra Assistant Commissioner and in the Police Department, but he should be transferred at once to another Division, and another Pashtu-speaking Tahsíldár should be sent in his place. I shall be obliged if His Honour will direct this.

4. The Deputy Commissioner has been requested to submit suggestions for the management of Agror and the taking over of the public and private business of the Khán now that he and his agent are removed, and more specially the safety of the valley must be secured from raids. If there is any doubt about the armed retainers of the Khán, whether their services in the protection of the valley can be depended upon, and if there is any difficulty about deciding who shall hold command of them and give them orders, the military garrison at Oghi had better at once be strengthened.

5. I advise that the evidence now in the hands of the Deputy Commissioner against the Khán of Agror may be held to be sufficient to warrant the above action in removing him to Abbott-abad, and it would seem to be the next advisable course that the Deputy Commissioner formulate charges against the Khán, and that the evidence should be gone through, and that it should be considered whether criminal proceedings shall be taken against him and his agent Fazl Ali in the same manner as against the late Ajab Khán of the Suddun Valley in Eusafzai.

6. The Deputy Commissioner is rightly informed as to the feelings of the Hassanzai and their bearing towards Háshim Ali Khán and the Khán of Agror. I think we should be prepared to expect a possible combination of the Black Mountain tribes to resist, as in 1868, the removal of the Khán and his agent from Agror.

7. If the Government of India sanction the preparation of a military expedition to move in the spring, and insist upon full reparation for misdemeanours from any tribes prepared to resist us in the Black Mountain and its neighbourhood, I advise that this fact be immediately communicated to the Hassanzai and other tribes concerned, as this may bring about the desired settlement.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 16th February 1888.

I HAVE the honour to report that, acting on the authority conveyed in your No. 1 of the 10th instant, I have summoned Fazl Ali Khán to Abbott-abad and placed him in detention here. Before doing so I heard what he had to say; he did not mention a single step as having been taken by the Khán to carry out the orders of Government. The necessity for removing Fazl Ali from Agror has I trust been amply demonstrated in my recent letters, and the proofs there given will be corroborated in the present one. I should add that I have written to the Khán to say that Fazl Ali is being detained here, certain proof having come to my knowledge that he was advising the Khán to act contrary to the instructions of Government, and I

have urged him in the time which yet remains to do his utmost to fulfil them. I have done this in order to give him the opportunity allowed, but at the same time, both from my past information and from that which I am about to relate, I have no doubt whatever that he will continue in the same course, and that his remaining in Agror at the present juncture is highly inexpedient.

2. I have received no reply from the Hassanzai Maliks, nor from Háshim Ali Khán, to the letters despatched to them on the 28th January under the orders of Government, but have information as to what they did, which will be related below.

An answer from the Khán of Agror reached me on the 8th instant saying that he was endeavouring to arrange for the return of the prisoners—a statement which I know to be false, and making various protestations of small importance. The information above mentioned I propose to give much in the form in which it was received, and put the reports in an appendix to this letter, noting their purport briefly below, and adding the recommendation which under the circumstances I am compelled to make.

3. *First.* The Hassanzaí sent a message to Háshim Ali Khán explaining the orders they had received from Government. They added that they had intended to refer to him and to the Khán of Agror, but as the messenger would not wait and they well know the views of the two Kháns named, they told a Mullah to write a reply as follows:—

"Since we promised to keep Háshim Ali Khán in order we have done so, but Government has without cause arrested his servant; then Háshim Ali Khán replied by seizing two men from Agror; let Government first release Turrabáz."

This has not yet reached me in writing.

4. *Secondly.* The letter to Háshim Ali Khán was forwarded through the Deputy Inspector of Police. Háshim Ali detained this messenger, and at once without letting him know sent off a servant to convey the news and ask the advice of Fazl Ali Khán. He in reply strongly urged Háshim Ali Khán not to return the prisoners.

To prevent misapprehension I should here remark that none of these reports have been received through the Deputy Inspector, to whom my informants are unknown.

Thirdly. Further, the Khán of Agror sent word to Háshim Ali Khán saying that the Deputy Commissioner appeared to suspect him or at least would not accept his views; that he had taken counsel with his friends, Akbar Khán, Gidarpur, Juma Khán of Mansahra, the Tahsíldár and another; that they had advised him to bring his complaints before higher authorities and work to get the Deputy Commissioner transferred; that he had accordingly intended to go to Pesháwar to make certain representations to the Commissioner, who had replied that he could not leave Agror at present, but must carry out the orders of His Honour the Lieutenant-Governor.

Fourthly. The Khán has since sent urgent messages to Háshim Ali Khán advising him to make another raid speedily without regard to the discomforts of the snow-covered roads—to do it speedily before Turrabáz should be hanged. He advised him to use a route which skirts the border of the Nawáb's territory and is practicable with some trouble, and he promised to furnish guides and to arrange for a village suitable to be attacked as soon as he should hear what number of men could be collected and when they were ready.

Fifthly. The Khán has repeated previous messages to Háshim Ali calling on him to choose some ruffian more reckless or more stupid than those who had been sent before to attempt the assassination of the Deputy Inspector who had arrested Turrabáz and brought much trouble on both.

5. These reports will at first appear startling or perhaps even incredible. I can only say that they have not been received through the Deputy Inspector, but through my own informants from Seri itself, from a source whence the information has usually been accurate, and I will ask your indulgence while I point out one or two facts which appear to me to attest their correctness and truth.

It will be observed that these reports coming to me from Seri through people unknown either to the Khán or to the Thánadár contain (1) a full

account of the terms of His Honour the Lieutenant-Governor's order to the Khán; (2) they relate the fact of the Khán having written you, of his receiving a reply forbidding him to go to Pesháwar, and not merely that, but they contain *an accurate resumé of your letter*.

Now the orders to the Khán were written in my own house, sent by post sealed and registered. No one in Agror but the Khán and his agent knew what they were, and he would certainly not divulge them to save his confederates.

Secondly. The same may be said of your letter to the Khán. You sent me a translation of it, but that letter has never been to my office, nor out of my keeping. No one in Hazára has set eyes on it. The fact that the Khán wrote to you and intended to complain against me may have been known in Oghi, but the purport of your reply was most assuredly known only to Government at head-quarters, to yourself, to me, and to the Khán and his advisers.

When I find such matters as these accurately repeated by men coming post haste over the snow from Seri, I am compelled to believe that they were reported to Háshim Ali Khán by messengers from the Khán and his agent at Oghi, and that my informers who work at some risk, but for pay for which an Afghán will do much, accurately report to me the messages received by Háshim Ali Khán and his replies.

Taken with the facts reported in my No. 244 C. of 4th February (paragraph 5) showing that Fazl Ali had had a secret interview with the chief offenders after the raid, taken also with the intercepted letter forwarded with my No. 255 C. of the 7th instant, I venture to submit that these reports, corroborated by remarkable intrinsic evidence of truth, make up a very strong case indeed to show that the Khán is even now actively engaged in promoting trouble and to prevent the fulfilment of the orders which His Honour strictly directed him to carry out. The only point not corroborated so far is his reported message to Háshim Ali Khán asking him to send some more determined or at least some more stupid and therefore more reckless men to attempt the life of the Deputy Inspector. I am inclined to think this report probable. Similar accounts have come to me before which for lack of proof I did not care to report, but the time has perhaps come when the matter should be stated.

6. This being the position, I am constrained to ask whether it is not advisable to remove the Khán at once. This may be done either by permitting me to summon him to Abbott-abad or by his being at once ordered to Lahore there to remain till affairs are less critical and he can do less harm. His Honour allowed him one month; more than half that term has already expired.

I can prove that he has done nothing in compliance but much in direct violation of the orders he received. No doubt is left in my mind that he is a thorough traitor to Government, and that he recks nothing of bloodshed in Agror so long as it conceals his machinations, furthers his objects, and raises his importance among the enemies of Government beyond the border as a useful friend, patron and protector. I would earnestly beg that this matter may receive early consideration, and that if the recommendation is approved I may be authorized by telegram to direct the Khán to move either to Abbott-abad or further.

7. One point remains: it will be observed that the report which otherwise bears with it remarkable evidence of truth mentions Fazl Ali's consultations with the Tahsíldár of Mansahra. You have yourself called for a report on petitions and complaints sent to you against the Tahsíldár charging him with taking sides with one of the two factions in Mansahra. Although I do not in the least wish to accuse him of any criminal intrigues, I have other reasons quite independent of this case for knowing that he has been weak enough to permit himself to become a partisan of one faction, with the principal men of which Fazl Ali Khán is allied by marriages and close friendship, and I should be very glad if you could arrange to transfer him.

An independent-minded, straight-going officer like Dilbágh Rái now at Haripur is greatly wanted in Mansahra.

APPENDIX.

Abstract of Reports referred to.

No. 1.—*Report received* 11*th February from Seri through A. B.*

On the 4th instant a man came to Háshim Ali Khán from the Thánadár of Oghi. Háshim Ali had a long talk with him, kept him there, and next day, without letting him know, sent his own servant secretly by the Akazai country to Chorkalán (Agror) with orders to send on to Fazl Ali Khán in Shamdarra the following message by one of the Syads of Chorkalán :—

"A man has come to me from the Thánadár with a sealed 'parwána' from the Deputy Commissioner, ordering me to surrender my prisoners. The bearer of the letter is a relative of mine, and he says the Thánadár threatened him that it would be very bad for him (the messenger) if he returned empty handed. What am I to do?"

Háshim Ali Khán's message to Fazl Ali.

On the evening of the 6th Háshim Ali Khan's servant returned, stated that he had forwarded the message from Chorkalán and had received in reply the following message from Fazl Ali Khán :—

"Tell Háshim Ali Khán you have other relations in Agror besides the man who brought the Thánadár's message. If you give in now it will be a precedent for the future. You should not think of releasing the prisoners until Turrabáz is set at liberty."

Fazl Ali's Reply.

Háshim Ali accordingly replied as advised to the man sent by the Thánadár, but that man stated he must at least get back the rifle and would not return without something. He had not returned to the Thánadár by 9th February.

No. 2.—*Report received* 11*th from Seri through A. B.*

The same messenger from Fazl Ali who is mentioned in No. 1 brought the following message to Háshim Ali Khán :—

"The Agrorwáls are on the alert since the Odigraun raid, and it will not be easy to catch any more of them; but they go without fear to the Nawáb's territory by the Shungli route. You should send some determined and experienced men to lie in wait to kidnap any strong travellers going to Shergarh, Nikapani or by the Shungali Pass."

No. 3.—*Report received* 12*th February through A. B. from Seri.*

The same informer who brought the above report (No. 2) was sent back to Seri on the 10th. He sends a relative by night with the following news because it is urgent.

A man from Fazl Ali reached Seri on the evening of the 9th and brought the following message :—

"I have consulted Akbar Khán of Gidapur, Juma Khán of Mansahra and the Tahsíldár. I told them from the Khán of Agror that the Deputy Commissioner evidently suspected us. They advised me to complain to higher authorities and represent that the release of Turrabáz was necessary for the peace of the border. On this I took advice from another old ally of mine. He promised to help on a fitting opportunity, and said he would speak of possible troubles on the border. Acting on this we sent a petition from the Khán of Agror to the Commissioner, saying that he wished to consult him and make representations in Peshawar. We have had an answer from the Commissioner saying that he would be glad to see the Khán at another time, but the Lieutenant-Governor was displeased with him about the Odigraun raid; that he must carry out the orders of Government and get back the prisoners within a month or two, or he would have to

Message from Fazl Ali to Háshim Ali Khán.

Note.—The terms of His Honour the Lieutenant-Governor's orders to the Khán have been carefully kept confidential and are known to no one in Agror but the Khán and his advisers; also no one but the Khán and Fazl Ali or their confederates can know the purport of the letter to him from the Commissioner, which is here fully detailed.
F. D. C.

go to Lahore with me (Fazl Ali) to explain matters. We cannot therefore go to Pesháwar. It is said the Deputy Commissioner is soon coming to Agror. When I see him I will learn all about it, and will advise you (Háshim Ali Khán) accordingly."

Fazl Ali's messenger repeated the above to Háshim Ali Khán, who said:

Message from Háshim Ali Khán to the Khán of Agror.

"Tell the Khán of Agror and Fazl Ali from me that a man has come to me from the Hassanzai Maliks with a letter."

They say: "When our jirga went to Government they bound themselves to

Message from Hassanzai Maliks to Háshim Ali Khán.

prevent Háshim Ali Khán from giving trouble in British territory or at least give warning if he meant mischief."

Accordingly the Deputy Commissioner has told us we are responsible for Háshim Ali Khán; that we must procure the release of his prisoners, and after that send a jirga to Government. We meant to have consulted you and Fazl Ali, but the messenger would not wait; so we answered without referring to you, and told a Mullah to write as follows:—

"Since we promised to control Háshim Ali Khán we have done so, and he has done no harm. Government has itself broken the agreement by the arrest of Turrabáz, and Háshim Ali retaliated by seizing British subjects."

NOTE.—No letter from the Hassanzai has yet come to me. It is quite possible they merely pretended to have sent such a reply.
F. D. C.

"We told the Mullah to write as above, but he is an ignorant man and no Munshi. God knows whether he wrote it rightly or not."

No. 4.—*Report from Seri received through A. B. on* 14*th.*

Yesterday heavy snow fell on the hills, but as the news is important I have come by night through rain and snow.

On the evening of the 11th a messenger from the Khán of Agror came to Háshim Ali Khán with the following message:—

Message from Khán of Agror to Háshim Ali Khán.

1. I have heard that the Thánadár's man has been pressing you to return prisoners or rifle; take care you do neither.

2. Ghulám Kádir, Khán Khel, cousin of Ibráhím Khán,* went to see the Deputy Commissioner, and it is said the Nawáb of Amb has summoned Ibráhím Khán. Probably Ibráhím Khán will work against you.

* Enemy and rival of Háshim Ali Khán.

3. It is reported that Turrabáz will be hanged. You can get his clansmen, the Yáru Khel of Kungar, Sabi, to help you. Never mind about the discomforts of the snow or the passes being blocked. Your idea of sending a hundred men of your Gájar and other servants to make a road through the snow is a good one; only let me know early in the morning how many men you can collect. I will arrange accordingly for a guide and fix on some hamlet or village, according to the strength of your party. But they must come by the Panjia Gali route through the skirts of the Nawáb's territory. This will disgrace him and accomplish your other objects. Háshim Ali Khán replied that he was making arrangements for this, but unfortunately fresh snow had fallen, and the enterprise must be put off.

4. Further, the messenger of the Khán of Agror said, some of my servants have deserted on a complaint of insufficient pay. The Thánadár has helped them; he is at the bottom of all our trouble. I have frequently told you to send some men to take his life, but your men have no spirit, and when they come here make excuses and say they cannot find an opportunity to do the job with safety to themselves. Send now some man carefully chosen, more hardy or at least more stupid, who will not seek so much of his own life. He can lurk about in the neighbourhood of the Thána, and must get an opportunity for a shot. The Thánadár's servants will run away, and the villagers only make a pretence of a pursuit. Even if caught and hanged, the murderer will not be your mother's son; it will not matter to you, and we shall escape.

16th February 1888. F. D. CUNNINGHAM.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 18th February 1888.

IN continuation of my No. 50 C., dated 17th instant, I have the honour to forward in original (to save time) a further letter, of the 16th instant, as regards the reply of certain Hassanzai to the Government communication now enclosed by the Deputy Commissioner. I do not advise that it should be accepted as the final reply of the tribe. Of the five Maliks whose seals are affixed, only Jahándád and Hamíd Khán are to be found in the list at page 679, Volume II. of the Gazetteer, North-West Frontier (Maclean Holmes), but I suppose that the Hamíd Khán of the Hassanzai petition is a Lukhmán Khel, and that the Hamíd Khán in the Gazetteer of the Kotwál section should really be Haidar Khán of Kandar. If so, then only Jahándád, who finds his place in Major McNeile's list of Maliks. But Jahándád with Umra and one Hamíd, both of the latter being Lukhmán Khel, were with me in 1885 as part of a deputation of 12 men interceding for some criminal, and they all called themselves Maliks.

2. The Deputy Commissioner should send a copy to the most important members of the Hassanzai Jirga and see that his communication got into the right hands, and ask them if this is the reply of the tribe which he is to forward to Government. Probably a large number of Maliks will repudiate it, and say they know nothing about the Deputy Commissioner's letter or this reply.

3. The Deputy Commissioner should also send another copy to the Nawáb of Amb and direct him to ascertain and report whether this is to be accepted as the reply of the tribe to the Government communication. The Nawáb will probably find a large and influential party in the tribe who will not allow that this is their answer. A copy of the Government communication to the Hassanzai will have been sent by the Deputy Commissioner to the Hassanzai in the first instance, or it should accompany this communication.

4. Further, I advise that directly it has been decided that a military expedition shall advance against the Khán Khel, the Hassanzai be distinctly warned that they are not to suppose that Government will necessarily allow them to make terms, and thus prevent troops moving against them if the former have once begun preparing for an expedition.

5. On the arrival of the Khán of Agror in Abbott-abad the Deputy Commissioner should proceed to examine him at length both in regard to the past and the future, and forward his statements and explanation of the condition of affairs for the information of Government.

6. There are, I consider, sufficient reasons now to prepare for serious attacks (snow permitting) upon our villages in Agrór. It must be very doubtful whether any confidence can be placed in the armed retainers of the Khán, and the Oghi garrison should be increased to something like 300 men. It is too cold for tents, and I think the Khán's family and followers might be directed to vacate their buildings in Oghi and betake themselves to Shámdarrah or other large villages, and troops might occupy the quarters vacated.

The Military Officer commanding would of course decide whether the above proposal to place some men in Oghi is advisable or not, and whether some troops should not occupy Belián or Ghanián, or other more advanced villages.

7. The Nawáb of Amb should be directed to strengthen immediately the garrison at Shergarh, so that there may be a sufficient number of men to move out in force against a large body of raiders. The Nawáb should report at once to the Deputy Commissioner the action he has taken upon these orders.

8. In my No. 50 C. of the 17th (yesterday's date) I said that the Deputy Commissioner had been requested thereby to submit proposals for the management of Agror in the absence of the Khán. In his letter now forwarded the Deputy Commissioner speaks of replacing the Khán by one more loyal to us, who it is supposed may have influence to modify the hostilities of the neighbouring independent tribes.

Perhaps one of the brothers of the Khán might be placed in Agror temporarily, and, if necessary, under the guardianship of some good man or Government official. I am not sure that Shahzáda Masúd, the Tahsíldár, whose transfer from Manserah is recommended, would not really be as good as any one for that position, but if the Deputy Commissioner thinks differently he can perhaps name some one else who would be perhaps capable of organizing the defence of the valley by the villagers in co-operation with our troops. I scarcely think that Rahmat-ullah Khán, the Deputy Inspector of Oghi, would have influence or head enough for these rather difficult duties.

9. I am dealing with the question of the transfer of Tahsíldár Shahzáda Masúd from Manserah this day in a separate letter.

A copy of this letter goes to the Deputy Commissioner, Hazára, for his guidance.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 16th February 1888.

IN continuation of my letter of to-day, regarding Agror affairs, I have the honour to report further information of which it appears important that Government should speedily be in possession, and which can conveniently be considered together with the letter above quoted, though it was unfortunately received too late to be included in that report.

2. I have received a letter from some Hasanzai Maliks in answer to that which was addressed to them by order of His Honour the Lieutenant-Governor. The real meaning of it is much the same as was related by my informants and reported in my last letter before the petition of the jirga actually reached me. They say they cannot compel Háshim Ali Khán to give up his prisoners, and Government had better set free Turabáz, after which they will use their good offices with Háshim to secure the release of his captives. The rest of the letter is mainly threats of what may occur if they and the other tribes join to assist Háshim Ali Khán. This is probably bravado; the only coalition likely to occur would be the Hasanzai and Akázai, and I have very little doubt that if the tribes once understand that Government had asserted itself in Agror, if the present Khán were replaced by one more loyal to us, hostile movements in the hills could be restricted to comparatively small dimensions.

3. I enclose also an account of further communications between Fazl Ali Khán and Háshim Ali Khán. The report speaks for itself; it appears to me interesting and very important, and I fully believe it describes accurately the secret policy of the Khán of Agror and his advisers. This report comes from a source which has been closely tested and has hitherto always supplied accurate information. Long before this correspondence arose the general trustworthiness of this agent was attested by my predecessor in reporting on another case. This report, like others, bears in it intrinsic marks of truth; the news was sent from Seri on the 14th, and mentions that Fazl Ali's last message received there stated that he had been summoned to Abbott-abad. What the upshot would be he did not know, but he suspected he might possibly be detained; and to meet that contingency he sent final instructions to Háshim Ali Khán.

My letter summoning Fazl Ali was despatched on the 12th, reached him on the morning of the 13th; the fact of his having been sent for would probably not have been known in Seri, unless he himself had communicated it. Most assuredly no one there, and no one in Agror, would have supposed that he would be detained in Abbott-abad. I have been very careful to do nothing from which anybody could suspect that such a step had been recommended; if he had not disclosed his secret suspicions to his friends in Seri they could not have been reported to me thence, nor even from Agror. In fact, the news of his arrest could only have reached Agror to-night, and in all probability will not be known there till to-morrow morning.

I could mention many other points of corroboration, which comparison of previous reports would bring out, but refrain at present from trespassing on

your time. Want of time and of space, and not lack of material to give additional proofs, compels me to be brief.

It will be seen that Fazl Ali and the Khán of Agror are confident in the belief that, whatever they may do, whatever suspicion may attach to them, or whatever steps may be taken to thwart their policy of working the border in their own way and for their own aggrandisement, they have a weapon which cannot fail them, and that they can always force Government to submit by raising fresh troubles on the Frontier. They refer pointedly to the precedent of the deportation and subsequent return of Ata Muhammad Khán, the present Khan's father, though the circumstances are of course different.

During the absence of Ata Muhammad Khán the Khánship was practically vacant; there was no one in Agror to work up a faction against his partizans in the hills.

But if the treachery of the present Khán were once proved to the satisfaction of Government (and I believe that had I the time to arrange or ability to state the facts of the case in clear and convincing sequence, there could be no other result but the conviction of his guilt), and if this conviction should be arrived at, Government would possibly determine to replace him by some more worthy member of his family, and the very fact of the appointment of a new man would to a great extent prevent union among the Black Mountain clans, leaving against us only those who are personally interested in the continuance in power of so excellent an ally as the present Khán of Agror.

No. 1.

TRANSLATION of LETTER from the HASANZAI MALIKS, to the DEPUTY COMMISSIONER (bearing the seals of JEHNÁDÁD, IBRÁHIM, UMRA KHÁN, HAMIEL KHÁN, HAMIDI, &c).

WE have received your letter, and understand its contents. You write that our jirga agreed at Haripur to control and be answerable for Háshim Ali Khán. We there said that we could not do this; that Háshim Ali was more powerful than we; that we could not use force, but only prayers and advice: this we have done. Suddenly Government arrested Turabáz. We have been disgraced; then the Khán seized two subjects of the Sarkár. He takes his own course; we are not responsible, and we cannot argue with him on account of the arrest of Turabáz. We mean no mischief, but if Government does anything against us, we shall follow the Khán, and when we move the Amír Sáhib of the Mujáhidín (Hindustánís) and our brethren, as far as Chakesar and Kohistán will be with us. Government will suffer great defeat and disgrace. If you are prepared for this, well and good; if not, it were better to let out Turabáz, then we will intercede with the Khán Sáhib to set free his prisoners.

Moreover, the Khán is chief not of us only, but of the Mada Khel and Akazai also. If we stop him they will not, and we are powerless.

NOTE.—This letter is not to be taken as representing the feelings of the whole clan. Hamidi, one of the Maliks who sealed it, is a creature of Fazl Ali and of the Khán of Agror. It was written with an object. The removal of Fazl Ali from Agror will probably induce different ideas, and the additional removal of the Khán would certainly weaken the faction which supports Háshim Ali. As a clan the Hasanzai have no great desire to fight for their nominal chief.

F. D. CUNNINGHAM.

No. 2.

Report from Seri received 16th instant.

An informer arrived this morning (15th). States that on the 13th at night a kásid from Fazl Ali Khán came to Háshim Ali Khán with the following messages :—

(1.) "To-day, Monday (13th) an order has come from the Deputy Commissioner telling me to go to Abbott-abad at once. I think I shall either be detained there or kept under surveillance, just as was done to me in 1882. I have impressed on the Khán all that he is to do. He will arrange for all that you and the other frontier tribes have to do, just as though I were here. As yet I do not know what I am sent for, but from the tenor of letters from the authorities to the Khán I fear the summons bodes no good. If I come back safe, well; if not, my last instructions (urdi) are these. If I am put in detention you must bestir yourself; send a jirga of the women of your house to implore the tribes to raise disturbances. Remember how, when in 1868 Ata Muhammad Khán was sent away, your uncle and Zaríf Khán, Akazai, gave such trouble that the Governor-General was compelled (láchári) to send him back. Remember how Government went to Kábul, imprisoned Dost Muhammad, grandfather of Yákúb Khán, and sent him to London, and how Akbar Khán fought till the Sarkár was forced to let him return. The Deputy Commissioner and all the authorities think that the Khán is nobody; that I do everything. If in my absence troubles continue they will think me innocent. But if you keep quiet from fear, or if you make any arrangement with Government, this will itself be proof of what I have done. Take care you listen to no one through whom the Deputy Commissioner may work, and never make peace. The Kázi * is annoyed with the Deputy Commissioner, and for this reason will join with us, though his real object is to get back to the management of border affairs, and he hopes to bring this about. If I am detained, I will still advise you through the Khán. I have impressed all on him; he will help you in all things. Let the Hassanzai and my friends among the Akazai know this. Send your answer to the Khán; he will let me hear."

Message from Fazl Ali to Háshim Ali Khán.

* Kázi Mír Alam, Honorary Magistrate.

(2.) To this Háshim Ali replied as follows :—

"My best friend, your message has reached me. I am much distressed and cannot express my sorrow. I hope you will return safe. If you are detained, it will be my misfortune, not yours only. If I am a true man, I will do what will move even the great Lord Sáhib in Calcutta. If the Deputy Commissioner or the authorities can be disgraced by my getting up a disturbance, be sure I will manage it. Be of good courage. I will do as you advise. I will procure your release, even though all Afghánistán is sacrificed to the armies of Government."

(3.) Fazl Ali also sent the following message to Háshim Ali Khán :—

"I have received your message about the letter from the Deputy Commissioner to the Hassanzai, and their reply, but I do not understand it thoroughly. The message went through two hands,† and in delivery through two messengers words get altered. Send this man, my own servant, direct to the Hassanzai to learn from them the exact terms of the message."

† Note.—See appendix to my letter No. 310 C. Háshim Ali told his messenger to go to the Sayad of Chorkalán in Agror, and from there send on another messenger to Fazl Ali.

Fazl Ali Khán's man reached Seri 9 o'clock at night. He only rested a few hours and was sent off by Háshim Ali to the Hassanzai Maliks; he returned

on the evening of the 14th. On the 15th Háshim Ali dismissed him, and he will be back in Oghi to-day. I (the informant) left Oghi early before he did. The Hassanzai told him that they had replied as follows to the Deputy Commissioner.

(Here follows a very accurate account of the reply of the Hassanzai Maliks which need not be repeated.)

F. D. CUNNINGHAM,
Deputy Commissioner,
Hazára.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated Lahore, 25th February 1888.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letters noted in the margin, supplying further information as to the course of events on the Agror border connected with the raid on Odigraun.

Dated 16th February, 17th February, and 18th February.

2. The news of importance disclosed by these papers may be thus summarised. Fazl Ali, the agent of the Khán of Agror, is in detention at Abbott-abad; a reply to the message of the Lieutenant-Governor has been received from certain Hassanzai Maliks, but it cannot be accepted as the reply of a representative jirga of the tribe; the answer denies responsibility for Háshim Ali's conduct; threatens the Government with defeat, and makes intercession with Háshim Ali Khán for the release of his prisoners, dependent on the prior release of Turabáz. There is also news, which the Deputy Commissioner believes, that the Khán has been inciting Háshim Ali to make another raid and compass the murder of the Deputy Inspector by whom the arrest of Turabáz was effected.

3. To dispose first of the minor matters requiring orders, I am to say that the Lieutenant-Governor approves the measures which you have directed for the purpose of ascertaining how far the reply of the Hassanzai Maliks represents the sense of the tribe. The strengthening of the Oghi garrison and instructions to the Nawáb of Amb to strengthen the Shergarh garrison are also approved. The location of the troops at Oghi and in the neighbourhood may be left to the discretion of the local officers, Civil and Military.

4. Mr. Lyall understands you to mean by the 4th paragraph of your letter of the 18th February, that if the Government orders an expedition, the fact that one is ordered should be made known to the Hassanzaís with the warning that if they wait till the last moment before submitting and complying with our terms, we shall consider ourselves at liberty to treat them as enemies, and to reject their submission. This seems right, but the question can stand over till the Government of India sanctions an expedition.

5. In the 8th and 9th paragraphs of the same letter you refer to the questions of the management of Agror in the absence of the Khán and the proposed transfer of Tahsíldár Shahzáda Mahsúd from Mansehra. As to the first of these matters, any temporary arrangements which the Deputy Commissioner may make with your approval for the management of Agror will be sanctioned by the Lieutenant-Governor. As regards Shahzáda Mahsúd, the Lieutenant-Governor thinks you might transfer him to some other place within the limits of your own Division, and subsequently, if necessary, the Financial Commissioner might be asked to transfer him to another Division. A copy of this paragraph will be sent to the Financial Commissioner for information in order that he may be prepared to supply you with another Pashtu-speaking Tahsíldár if necessity arises.

6. Coming now to the main question which requires orders, viz., the manner in which we should deal with the Khán of Agror, I am to say that the decision involves issues of considerable political consequence, especially when the analogy of the present situation to that of 1868 is borne in mind. As at present advised, Mr. Lyall thinks it would be right to proceed criminally against the Khán and Fazl Ali if the evidence which could be given at the trial seems sufficient to secure convictions. It is well known that the effect produced on the Pesháwar border by the criminal trial and

conviction of Ajab Khán of Chargulai for bringing down raids in Yusafzai was excellent. On the question, however, whether a criminal prosecution shall be instituted or not, Mr Lyall cannot form a decided opinion without having before him a précis of the evidence and the results of the examinations both of the Khán and of Fazl Ali which have been directed.

7. If after the explanations of the Khán and Fazl Ali have been taken it does not appear clearly to the Deputy Commissioner and yourself that criminal charges can be formulated against the Khán, supported by evidence which would in all probability secure conviction before the Sessions Court and the Chief Court, but at the same time you are both of opinion that it is not advisable to allow the Khán to return to Agror, then Mr. Lyall wishes the Khán either to be kept at Abbott-abad, or if that course seems undesirable to the Deputy Commissioner, to be directed to go either to Pesháwar or to Lahore to answer the charges against him to yourself or to the Lieutenant-Governor, whichever may seem to yourself and the Deputy Commissioner the most expedient arrangement. If, however, the evidence described in the preceding paragraph is clearly forthcoming, and you and the Deputy Commissioner are agreed that criminal proceedings should be instituted, the Khán and Fazl Ali should be arrested like any other accused persons, and arrangements made for holding a magisterial enquiry. It would be right in this case to depute some officer from Pesháwar like Mr. Christie to act as committing Magistrate, and you have authority to order this deputation, if required; but, as said above, the enquiry under the Code of Criminal Procedure should not actually begin until the Lieutenant-Governor has had an opportunity of considering the explanations of the Khán and Fazl Ali. If, on the other hand, there is a difference of opinion between yourself and the Deputy Commissioner as to the course which should be pursued, the matter should be referred for the further orders of Government.

ENCLOSURE No. 13.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 3rd March 1888.

IN continuation of my letter, dated 24th February 1888, I am directed by the Lieutenant-Governor to submit, for the information of the Government of India, a copy of a letter* from the Commissioner and Superintendent of the Pesháwar Division, with enclosures, from which it will be seen that the Deputy Commissioner of Hazára has made over the boy Amín Khán, son of Abdulla Khán of Dilbori, to his grandfather, Abdul Ghaffár Khán of Trund, as an escort across the border.

* Dated 24th February 1888.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 24th February 1888.

WITH reference to paragraph 7 of Secretary to Government, Punjab's No. 516 of 19th December, and in continuation of this office No. 817 of the 15th instant, forwards for information a copy of the Deputy Commissioner, Hazára's No. 340 of 20th instant, reporting that the son of Abdulla of Dilbori has been sent back across the border to his father. Abdulla Khán has been informed by the Deputy Commissioner that it is held to be proved that he aided and abetted the raid on Bágrián in July.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 20th February 1888.

IN continuation of my No. 301 of 15th instant, I have the honour to state that I made over the boy Amín Khán, son of Abdulla Khán of Dilbori, to his grandfather Abdul Ghaffár Khán of Trund, who has come here with a jirga from Tikri to pay up Rs. 700 which I ordered them to refund as the ransom extorted from a Hindu who was kidnapped in November last.

I enclose translation and copy of a parwána addressed to Abdulla Khán conveying to him the orders of His Honour the Lieutenant-Governor as expressed in paragraph 5 of letter from Secretary to Government, to Commissioner, Pesháwar, No. 516 of 19th December 1887.

PARWÁNA to ABDULLA KHÁN, late of Dilbori.

IT has been proved that before you left the Parári country you aided and abetted a raid which was made on Sakhi Sháh of Bágrián last summer; that you were present in the fight which followed; and that your brothers were present with the raiders.

The Honourable the Lieutenant-Governor has therefore directed that your son Amín Khán, who has hitherto been maintained and educated at school through the kindness of Government, should be sent back to join you in exile, as it appears clear that the thought of your son's advantage has no effect on your conduct.

I am further directed to warn you clearly that, until you surrender absolutely and unconditionally, the Government will not show you any mercy or listen to any representations in your favour.

No amount of misconduct on your part will induce Government to alter its orders, and your best policy is to prove your repentance by unconditional surrender.

ENCLOSURE No. 14.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Camp, 15th March 1888.

IN continuation of my letter, dated 28th ultimo, I am desired by the Lieutenant-Governor to submit, for the information of the Government of India, the accompanying further correspondence* on the subject of the kidnapping and robbing of certain Hindús in the Mansahra Tahsíl of the Hazára District during November last.

* From Commissioner, Pesháwar, dated 24th February 1888.
Punjab Government reply, dated 15th March 1888.

2. It will be seen from the papers that the different sections of the Tikriwáls have paid up Rs. 700 in restoration of the ransom money which they had received for the Hindu Jowáhir and in compensation for the articles stolen from him.

3. Mr. Lyall has accepted this settlement, but he has remarked that a fine might properly have been inflicted, not only because we hold the tribes jointly responsible, but because in this case the tribal sections endorsed the outrage by dividing the ransom amongst themselves. The fact, however, is that the only political significance of the case which has now been settled is that already indicated in my letters, dated the 10th February last, and 28th idem, viz., the insolence of these Tikriwál thieves was evidence of a low state of our prestige on the Hazára border.

4. In my letter No. 48 C. of this date, replying to the Commissioner, Mr. Lyall has given some further instructions regarding the oustanding claims against the Chigarzaís and Parári Syads and Rahím Khán of Chirmang which need not be repeated in this letter.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Pesháwar, 24th February 1888.

IN continuation of this office letter of the 13th instant, I have the honour to forward a copy of Deputy Commissioner, Hazára's, dated 20th instant, in which he describes the action of the tribes across the border in connection with the kidnapping and robbing of certain Hindús in the Mansahra Tahsíl on the 16th November 1887.

Rupees 700 have been recovered from the tribes concerned, and the case has been satisfactorily settled by the Deputy Commissioner.

Warrants for arrest will remain out against Nawáb Khán of Dharyan and Malkal, as explained in the enclosure, in order to assist the tribes in compelling them to pay up their share of the penalty incurred.

A complimentary certificate has been sent by me to the Deputy Inspector of Police, Rahmutulla Khán, as desired by the Deputy Commissioner.

2. In his 2nd paragraph the Deputy Commissioner alludes to the suspicion attaching to the Khán of Agror and his agent that they not only have not assisted in the settlement, but have actually endeavoured to prevent it. This will form one of the subjects of enquiry in dealing with the Khán.

3. The Deputy Commissioner then in this 3rd paragraph implies that the Khán of Agror and his party among the Akazai tribes may have prevented the settlement of a long-standing difficulty with them. The last letter in that case is this office No. 5338 P. of 15th November 1887. This matter will no doubt also be enquired into by the Deputy Commissioner in his examination of the Khán of Agror and his agent now being carried on.

4. The Deputy Commissioner then alludes to two unsettled cases against tribes to the north-east of the Black Mountain,—the Bágrián raid of 11th July 1887, in which the last letter is this office No. 947 P. of this date; and the murder of Núr Jamál of Ghaniyán on the 21st August, in which the last letter is dated 13th instant: and he shows that we have outstanding against Sayads of Parári and Chiggarzaís Rs. 660, and against Rahím Khán of Chirmang Rs. 360, which the Deputy Commissioner would raise to Rs. 800 and Rs. 500, respectively, if troops are moved against the tribes, to which there seems no objection.

5. The Deputy Commissioner then urges the removal of Fazl Ali Khán, agent of the Khán of Agror, permanently from the valley, and the deposition from his Khánship of Ali Gauhar Khán and the substitution of a brother as Khán of Agror.

In another correspondence ending with this office No. 52 C. of the 18th instant, I have advised His Honour as to the action which I consider should be taken against the Khán of Agror and his agent.

6. As to the measures necessary against the Black Mountain and neighbouring tribes generally, I have addressed you separately in this office No. 57 C. of this day's date.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 20th February 1888.

IN my No. 4373 of the 29th November I reported the kidnapping of a Hindu of Mansahra by three thieves from Tikri; in my No. 4489 of the 13th December I related the details of the affair, that he had been set free on payment of ransom, Rs. 650; and I have now the honour to report that after many evasions and attempts to shirk responsibility a fairly complete jirga of the Malkal, Naror and Ashlor sections have come in and paid up Rs. 700, which I have restored to the Hindu in open darbár as the sum extorted from him and the value of petty things stolen from his person. I imposed no fine in addition, because the offence had no political significance, but was the act of three men who set out on a thieving expedition, and by chance came across the Hindu whom they carried off. The Tikriwáls as a

community had no connection with the act, though they shared in the profits. Ali Khán, the thief, was not strong enough to keep the plunder to himself. As soon as it became known that he had brought a Hindu captive, the hungry Narors and Malkals gathered round at once, covened jirgas, nominally to arrange the return of the Hindu, but really to share in the plunder. Even the Deshís on getting news set out to join them, but arrived too late.

2. It is unnecessary to describe in detail the history of the affair since the demand was first made on the Tikriwáls. The bulk of the money was collected some time back, and the jirga would have come in ere this but for the interference of Fazl Ali Khán and the Khán of Agror, who, as described in my letter, paragraph 9 of 14th January (on Agror affairs), got the seals of some Tikri Maliks attached to a sham petition through a servant or tenant of the Khán who is a native of Tikri. I may mention that several persons present in the jirga testified to the interference of Fazl Ali Khán. Some whose names only appear on the paper deny that they ever saw it; others whose seals are affixed say that they made no such petitions, but that a Tikriwál living in Agror, a tenant of the Khán, came to them from Fazl Ali Khán and asked them to put their seals to a paper to support a petition which the Khán was to send in asking for more rifles from Government. Fortunately I was warned of his work in time, and when the sham petition came to me in due course with a letter from the Khán of Agror, I refused to take notice of it, with the result that the entire demand made on the Tikriwáls has been satisfied. The only men of importance absent were Nawáb Khán Ashlor of Dharyan and Rahím Khán Malkal of Chirmang, who is a connection and ally of the Khán of Agror. They refused to pay up their shares, but their fellow clansmen in each section made them good and asked me to help them to recover the amounts due from the defaulters by arresting them or any members of their families or followers who might come to British territory: to this I agreed.

3. I venture to think this is a satisfactory settlement of the affair, because though the Kháns of Battal, Gidarpur and Mansahra were sent by the Tahsíldár to get back the Hindu, which on payment of ransom they succeeded in doing, in the somewhat more difficult matter of compelling the clans to disgorge the money extorted, no Khán has been used as a go-between; no one has been taken as surety for money unpaid, and there can be no suspicion of any one in British territory having helped to pay up a merely nominal fine. Every rupee of the Rs. 700 has come out of the pockets of the people of Tikri. The accomplishment of this has really been due to the alertness of Rahmatulla Khán, Deputy Inspector of Oghi, who arrested four Tikriwáls, among whom one was son of Muhammad Sháh, an influential Malkal. On orders of detention of Tikriwáls being issued, more than 20 men were sent into Abbott-abad. I at once discharged all but the four above mentioned, the others being found to have no connection with Tikri. In the correspondence connected with the arrest of Turrabáz, Hassanzai, I have reported the good service of the same officer, whose success in this case contrasts with the utter apathy and neglect of the Khán of Agror, who with far better means for information and a small army of tenantry and dependants has, so far as I am aware, never given the slightest assistance to effect the realization of fines imposed on Khán Khels, Akazaís or Pharárís. The position of Rahmatulla Khán, Deputy Inspector of Police, has for some time past been difficult and beset with danger. He is an old man near the end of his service, and if he continues to do good work in Agror, it will be my duty to suggest for the favourable consideration of Government that he should receive the reward of which hopes were held out to him in 1884 on condition of a settlement being effected with the Akazaís. It is through no fault of Rahmatulla Khán that the Akazaís have not submitted. The refractory party among them are allies of the Khán of Agror.

Meanwhile I would be glad if you would give a commendatory parwána to Rahmatulla Khán in recognition of his alertness in this matter and as an encouragement to him in the present situation.

4. This case having been settled, it may be convenient here to look round and take stock of our scores with other clans on the Agror border.

The unsettled cases are as follows:—

(1.) *The Bhagrian raid, 11th July* 1887.

	Rs.
Loss put at - - - - -	120
Two men killed in the fight which ensued -	600
	720

This case should be charged against (*a*) Miyán Said and other Sayads and the Chigarzaís of Pharári, and (*b*) Rahím Khán of Chirmang Tikri whose tenantry and servants joined. Ghuffár Khán of Trund has been named as in part responsible, but he was absolved by Mr. Thorburn. On coming here he declared that two Chigarzaís who hold land of his were present, but that he had turned them out. The truth is that these Chigarzai immigrants are not easily managed by the Swathís of Tikri or the Sayads of Pharári, and take their own course.

(2.) *The Murder of Núr Jamál of Ganián on 21st August by Chigarzaís of Pharári.*

The persons responsible are the Sayads and Chigarzaís of Pharári. In my No. 4296 of 19th November 1887 I proposed a fine of Rs. 500, but I would prefer now to put it at Rs. 300.

The offence was the work of one or two ruffians, and not an act of hostility on the part of the clan. If these are admitted we have—

(*i.*) Against the Sayads and Chigarzaís of Pharári jointly—

	Rs.
(*a.*) For Bhágrián raid - - - -	360
(*b.*) For murder of Núr Jamál - - -	300
	660

(*ii.*) Against Rahím Khán of Chirmang for Bágrián case Rs. 360, to which may be added any fine which may be imposed for the breach of territory. It would be useless to attempt to fix that now. Much will depend on the manner in which Government is prepared to enforce its demand.

If a blockade only is proposed I would announce no additional fines till we have seized men or property which will ensure payment. If in connection with recent affairs on the Agror border troops are moved to the frontier, I would take a higher tone and insist on the payment of Rs. 500 by Rahím Khán of Chirmang, and Rs. 800 by the Sayads and Chigarzaís of Pharári.

The least sign of determination on our part will settle these cases. On the first sight of British bayonets near the Agror border the Tikriwáls and Pharáriwáls will come trooping in to pay up.

Mián Said has for some time past been anxious to come in, but has been persuaded by Fazl Ali Khán not to do so. One proof of this was contained in my No. 255 C. of 7th instant, forwarding an intercepted and undoubtedly genuine letter from Mián Said to Fazl Ali. Another proof is that Zámin Sháh, a Sayad of Kabbal (Agror) was in communication with the Pharári Sayads, advising them to come in. Fazl Ali sent for his brother and threatened to turn them both out of Agror if they did not desist. Zámin Sháh spoke about this to Fazl Ali, who told him to go to Mián Said to satisfy himself. He went to Pharári and there Mián Said said straight out that he wished to come in, but Fazl Ali threatened him, and had just now a hold over him, as the girl to whom he is betrothed is still kept back by the Khán of Agror, her brother.

The removal of Fazl Ali Khán and of Ali Gohar Khán will stop all these intrigues, and the cases named above will then be easy to settle.

5. There remain the Akazaís and Hasanzaís. They too will be weakened and distracted by the departure of Ali Gohar Khán, and if Government decide that the case against the Khán is strong enough to justify his deposi-

tion from the Khánship and the appointment of a successor (and a much worthier brother is available), these clans will not be united; the only section likely to support Háshim Ali Khán and the Khán Khel being the party o the sons of Zaríf Khán of Led (of Shahtút notoriety) and other allies of the present Khán of Agror. The Mada Khel are not likely to move, and the Chigarzai will probably hold aloof.

The whole position will be greatly simplified, the air cleared of intrigues, and the party hostile to Government will be utterly discomfited by the disgrace of their ally, the present Khán, and the nomination of a better man.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated Camp, 15th March 1888.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letter, dated the 24th ultimo, submitting a further report in connection with the kidnapping and robbing of certain Hindús in the Mansahra Tahsíl of the Hazára District which occurred in November last.

2. It appears that a fairly complete jirga of the Malkal, Naror and Ashlor sections of the Tikriwáls has come in and paid up Rs. 700, the equivalent of the ransom given for Jowáhir, Hindu, and of the value of the articles stolen from his person. The Deputy Commissioner has imposed no fine in addition to this payment because the offence had, in his opinion, no political significance, and was the act of three men who set out on a thieving expedition and accidentally came across the Hindu whom they kidnapped. The settlement is accepted by you as a satisfactory one.

3. Mr. Lyall accepts the settlement, but remarks that a fine might properly have been inflicted, not only because we hold these tribes jointly responsible, but because in this case the tribal sections endorsed the act by dividing the ransom. Mr. Lyall, however, will accept the view of the Deputy Commissioner and yourself that there were reasons on this occasion for not pressing for the payment of a fine in addition to the restoration of the ransom and of the value of the stolen articles.

4. As regards the other proposals mentioned in your letter, I am to say that Mr. Lyall sees no sufficient reason for reducing the fine in the case against the Chigarzaís and Parári Syads for the murder of Núr Jamál from Rs. 500 to Rs. 300. The crime was a singularly cruel and unprovoked one and was really directed against the Government. The claim against the Chigarzaís and Parári Syads for this offence and for their share in the Bhágrián raid will thus be Rs. 860 in any case. Mr. Lyall agrees to raising the claim against Rahím Khán of Chirmang from Rs. 360 to Rs. 500 if troops are employed, and in that case he thinks the claim against the Parári Syads and Chigarzaís should be raised from Rs. 860 to Rs. 1,000; but he will not press this view if you and the Deputy Commissioner do not think it advisable.

ENCLOSURE No. 15.

TELEGRAM from SECRETARY to GOVERNMENT, Punjab, to FOREIGN SECRETARY, Calcutta, dated Dera Gházi Khán, 15th March 1888.

FOLLOWING received from Commissioner, Pesháwar:—*Begins.* Háshim Ali and Hassanzai refuse release of kidnapped persons, and Akazai writing to Háshim Ali, who forwards their letter, speak of Fazl Ali as deprecating their release which would be injurious to his interest. The letters are threatening. I am consulting Hazára and Pesháwar as to their readiness and that of Amb for immediate blockade of Hassanzai. *Ends.*

ENCLOSURE No. 16.

TELEGRAM from SECRETARY to GOVERNMENT, Punjab, to FOREIGN SECRETARY, Calcutta, dated Dera Ghazi Khan, 15th March 1888.

FOLLOWING received from Commissioner, Pesháwar:—*Begins.* Hazára reports seizure and detention in independent territory by Parári and Bullandkot Syads with their Chigarzai tenants of two British subjects, probably an act of hostility or impertinence. Explanation called for. Khán of Agror suspected by Deputy Commissioner of having instigated. A strong detachment of 250 Sikhs are about to march to Agror. *Ends.*

ENCLOSURE No. 17.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to OFFICIATING SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated 15th March 1888.

IN continuation of my letter dated the 6th February last, regarding the raids on the Allai border of the Hazára District which occurred in July 1887, I am desired by the Lieutenant-Governor to submit, for the information of the Government of India, the further correspondence noted in the margin.

Demi-official letter dated 1st February 1888, from the Secretary to Government, Punjab, to the Commissioner and Superintendent, Pesháwar Division.

Demi-official letter dated 15th February 1888, from Colonel W. G. Waterfield, C.S.I., Commissioner and Superintendent, Pesháwar Division, to the Secretary to Government, Punjab.

2. The important point disclosed by these papers is that the blockade of the Allaiwál tribe has been allowed to lapse without the sanction of Government, and that the claims against the tribe referred to in the correspondence of 1880-1881 are still unsatisfied.

3. The Commissioner has been informed that it is not, in Mr. Lyall's opinion, expedient to re-impose the blockade at present, and that it will probably be wise to temporize with the Allaiwáls till we can settle with the Khán Khel Hassanzaís and others on the Hazára border. Arsala Khán will, however, be reminded of the claims outstanding against him.

4. Full information as to our present relations with the Khán Khel Hassanzai will be found in the correspondence of which my letter, dated the 26th January last, forms a part. Mr. Lyall has not yet received the instructions of the Government of India upon his note of the 23rd idem.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab, to COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 1st February 1888.

I HAVE been looking into our file ending with your letter, of the 4th January, on the subject of the Allai raid of July last. The Government of India has again called for a further report, and perhaps we shall send on the papers that we have now; but I cannot be sure from the file that my office has sent up that I thoroughly understand the position. I see that in 1880 we were on the point of sending an expedition against the Allaiwáls in consequence of complications starting from the raid on Battal committed on the 16th November 1878 at the instance of Arsala Khán, who was himself present in person and led the gang (*vide* our letter to you No. 1818, dated 6th October 1880). Later on, however, the Government of India determined that the objects to be obtained were hardly worth the trouble and expense involved in moving across the border more than 7,000 men, and said that the question would be reconsidered at the beginning of the next year. There is some further unimportant correspondence about a raid on Mulki Dhaka; but for practical purposes my papers end with the Government of India orders of 21st October 1881 declining to allow the expedition. Have the Allaiwáls

really remained under blockade since 1878, and are the terms described in paragraph 3 of our letter, dated 17th September 1881, viz. :—

(1) payment of Rs. 5,000 out of Rs. 10,000 imposed on account of the raid on Battal;
(2) payment of Rs. 500 on account of the attack on the survey party;
(3) submission of Arsala Khán;

still outstanding against them? If so, how is it that the Deputy Commissioner finds 54 Allaiwáls in British territory.

We do not seem to have received your long memorandum sent to the Deputy Commissioner with your No. 4974, dated 18th October, or his reply, dated 21st November. Perhaps these points are fully gone into in that correspondence. The Lieutenant-Governor does not wish to call upon you officially to submit these papers, but thinks you should send them to us for information if you think they will clear up the case. Anyhow, I should be be very much obliged if you will help me to understand more clearly what our position is with reference to the Allaiwáls. I see that Mason (bringing the case up to 1st April 1884) writes at page 22 of his revised edition of Paget that Arsala Khán and the tribe have been conciliatory, and Arsala too much occupied to give trouble, though the terms have remained unfulfilled.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to OFFICIATING SECRETARY to GOVERNMENT, Punjab, dated 15th February 1888.

YOUR demi-official of the 1st February seems to me to correctly summarize the situation as regards Allai. But in my office file containing your No. 2278 of the 28th October 1881 I find a further correspondence between the Deputy Commissioner, Hazára, and Commissioner, which was not forwarded to Government. I now enclose a copy of this—

Deputy Commissioner, Hazára's No. 603 of 8th December 1882.
Commissioner's No. 325 of 25th January 1883.

This shows that an Allai jirga had been with the Deputy Commissioner, Hazára, in November or early in December 1882. How they came in when the tribe was under blockade is not explained or noticed, and Cordery did not ask. Apparently the Allaiwáls had no fear of appearing in British territory to intercede for an individual, or to ascertain the feelings of Government as regards a settlement with Arsala Khán.

McNeile wrote favourably of the conduct of Arsala Khán, especially in the Mulki raid case. Cordery rightly declined to give Arsala Khán any pledges as to the remission of fine against him, and thereby induce him or his son to come in to the Deputy Commissioner as they perhaps were not unlikely to do. Cordery had noticed the good conduct of Arsala Khán in his No. 3631 of the 19th September 1882 in the Mulki raid committed by Allaiwáls.

The Allaiwáls are reported still under blockade, and the terms described in your No. 2040 of 17th September 1881 are still outstanding against them.

2. I now enclose copies of the memoranda sent by me to the Deputy Commissioner, Hazára, with my No. 4974 of the 18th October last, and his reply, No. 4311 of the 21st November. These will show that the men seized as Allaiwáls and released were perhaps not so (*see* paragraph 6 of Deputy Commissioner, Hazára's letter). I rather suspect that there must have been some Allaiwáls amongst Nindaharís and Deshís arrested; otherwise Arsala Khán would not have alluded in his correspondence with the Tahsíldár of Mansahra to their seizure and release. They seemed to me to refer more to the treatment by the Deputy Commissioner of the case under consideration (the raid by Mukkaddas and Mada Khel Allaiwáls on the 4th July last), and it did not seem to me necessary to bring them before His Honour, but they will now perhaps help to elucidate Allai affairs.

The correspondence between the Tahsíldár of Mansahra and Arsala Khán of Allai show a desire on the part of the latter to obtain credit for good intentions as regards Government in the case of a raid which had been committed without his permission.

3. I forwarded a copy of your demi-official under reply to Cunningham, and I now enclose a copy of his note in reply. I was not in Pesháwar after March 1881 until April 1883.

I think that Allaiwáls must have been gradually allowed to come in and out of British territory unmolested, but I have no doubt that Arsala Khán fully understands that his affairs with Government are unsettled, and that there is a heavy fine out against him and his followers which could be realized if opportunity occurred, and he has therefore ever since been conciliatory in his demeanour, and he would like to do some service for Government which could be reclaimed as a set-off in his account.

If a seizure is made of Allaiwál traders in British territory I do not think that it will have any result as regards Arsala Khán, except that it may bring about retaliatory raids by him.

If there is any chance of troops moving in the direction of the Black Mountain at Tikri and Nindahar, I think that Arsala Khán should be reminded that there is a matter with him still unsettled. This would keep him quiet, and perhaps bring about expostulation on his part and discussion which might lead to settlement, especially now that the Akhúnd of Swat no longer lives to influence him; but I should not be inclined to advise any seizure of Allaiwáls now occasionally appearing in British territory. I do not think it would much influence Arsala Khán, but it might help him to recover authority in his tribe which is just now weakened. The Allaiwáls cannot bring in Arsala Khán or depose him, and I think men of the tribe seized in reprisal would be left on our hands without any result being obtained.

If His Honour thinks it advisable to enforce the blockade more rigidly, I should do so by warning Arsala Khán and Allai generally of the unsettled account, and this would prevent the tribe from any free intercourse with British territory and might bring some pressure to bear on them, and through them perhaps on Arsala Khán without irritating either. I think a warning to Allai would be quite sufficient to make it at once again blockade itself, and our traders might be warned against dealing with Allai.

I should not, however, be inclined to advise any stirring up of the Allai question until our account with the Black Mountain tribes had arrived at or were approaching settlement.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 8th December 1882.

I HAVE the honour to inform you that the Allai jirga has come in, nominally to intercede in the case of a refugee from our border, really to find out whether if Arsala Khán or his son comes in Government will overlook former offences and let them off the fine imposed on account of the Battal raid. Arsala Khán has behaved well since I have held charge of this district. Not only has he refrained from all offences himself, but he actually attacked the Musa Khels and burnt their village because they carried off some of our cattle from Mulki. Of course he may have had private reasons for this attack besides, but, as a fact, he did attack them when I wrote to him about the robbery and did send the cattle back.

As it is unlikely Government will send a force against Allai now, I think it would be wise to tell Arsala Khán Government will remit the fine if he or his son comes in. It will leave him more than ever without excuse, while it will give us a pretext for not continuing to demand a fine which will never be paid without a force being sent to collect it; and if he does come in it will be as good a security for the future good behaviour of Allai as could be obtained from any tribe proverbially so untrustworthy as the Swatís. If Government sanctions it, therefore, I would write to Arsala Khán and tell him Government will remit the fine if he comes in or sends his son.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 25th January 1883.

IN reply to your predecessor's No. 603 of 8th December last, I have the honour to state that I should be averse to taking the initiatory step to such an offer as that proposed by Major McNeile to Arsala Khán on the part of Government. But there can be no objection to allowing either him or his son a safe conduct if they are inclined to visit Abbott-abad. Whether after that act of remission the fine should be formally remitted by Government would depend on the pledges he might then be inclined to give for his good conduct in the future. The visit in itself would be a satisfactory thing to bring about, but it should not be purchased by any previous offer of a remission of the fine.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 31st October 1887.

WITH reference to Deputy Commissioner's No. 630, dated 10th September, returns the files received from him, and forwards a copy of Commissioner's memorandum dated 17th October, and enclosures, for guidance.

MEMORANDUM, dated 17th October 1887, by COMMISSIONER and SUPERINTENDENT, Pesháwar Division, *in re* RAID in NORTHERN GLEN of BHOGARMANG on 4th July 1887 by MUKKADDAS and other MADA KHEL ALLAIWÁLS.

I GATHER from the file that Mukkaddas of Allai complained of "kut" (orris root) having been dug up in his land (independent territory) by employers of Mastu, Khatri, living in British territory.

His petition was sent to the Tahsíldár on the 8th September 1886 for enquiry.

The Tahsíldár did not report until the 21st of January 1887.

Mukkaddas was examined by the Deputy Commissioner on the 22nd February 1887, and complained of the delay and injustice.

I think it would be better to enquire from the Forest Department if there is "kut" in Bhogarmang in British territory and in the quantities collected by Mastu, Khatri. The Forest officials will know this, and it will probably be ascertainable whether the "kut" was brought over from beyond the border. It is a case which might well have been submitted to a jirga, which would have easily ascertained the facts and probably have made Mastu pay some due to Mukkaddas, and thus have settled the case or he could have felt satisfied by the decision whatever it was. I don't myself think that it was probably a false claim. I feel pretty certain that it was a true case. But this is merely guess work. The above would have been a better way of disposing of it than by referring Mukkaddas to the Courts. The raid resulted. I understand that all the property carried away has been recovered, or nearly all. I wish to know exactly what deaths have resulted to British subjects and what woundings. This may have to be gone into at the time of settlement. The Tahsíldár, the Deputy Inspector of Police, and Imán Dín all differ on this point.

The Tahsíldár's report of 21st July (paper 84) states that 57 men were seized in British territory as a reprisal, but that they were from Nindahar Deshís, Tikri, Kohistán, &c., and that none were Allaiwáls. I do not understand how the Deputy Commissioner reports that he seized and subsequently released 54 Allaiwáls. There must be some mistake.

The Deputy Commissioner himself should see to the orders issued regarding grazing guards and not leave it to the Tahsíldár or Police. They will then be sensible orders which can be carried out. The Deputy Commissioner's order of 19th July 1887 is to make reprisals upon and to seize any of Mukkaddas' followers or party who may be found in British territory. This amounts to a partial blockade of the Allaiwál tribe.

It is not the usual policy of Government to deal with a portion of a tribe and blockade only that; but in the present case Arsala Khán appears to have done what he could in compliance with the orders of Government to effect the release of prisoners and property, and I don't think Government could well now issue orders for the blockade of Allai on account of this raid. Does the Deputy Commissioner mean to blockade and seize the Mada Khel section or only followers of Mukkaddas? The orders should be made clearer than they are. Has any ransom been paid to Mukkaddas or others or any payment been made, and by whom and what? This must be ascertained and recorded. The letters to Arsala Khán by the Tahsíldár, translations enclosed, are improperly worded; they should not have repeatedly spoken of Arsala Khán's friendship with the British Government. Arsala Khán has a fine out against him, has been summoned and not come in, &c. The Deputy Commissioner should himself have seen that these letters to Arsala Khán sent by the Tahsíldár were properly worded. It should be stated whether any present has been sent to Arsala Khán, as suggested by the Tahsíldár in his memo. of 26th July (171). This would be very objectionable. It appears to me highly probable that this trading Hindu has been a party to the stealing of "kut" from independent territory, and has by denial brought down upon British territory a raid in which loss of life and property has occurred.

He himself escapes scot free. I suggest that the Deputy Commissioner after he has received the report of the Forest Department put the whole case before a jirga to be summoned for this purpose, consisting of respectable men from British territory and Allaiwáls, and that first the question of the "kut" be gone into; second, the raid and the losses. A settlement of accounts should be effected, and this blockade and order for reprisal should not be allowed to simmer on, or we shall have further complications.

Meanwhile (I suppose the case may be settled in November before the snow falls) Mastu should be forbidden to enter Bhogarmang, and should be made to give security for good conduct until the settlement of the case, and I think that the "kut" should be seized and attached pending settlement, or if sold, its value be either placed in deposit or held available under security.

TRANSLATION of a LETTER, dated 11th July 1887, from the TAHSÍLDÁR of Mansahra, to ARSALA KHÁN of Allai.

INFORMATION has been received regarding a raid committed by Mukkaddas, Mada Khel. You may also have heard regarding the misconduct of Mukkaddas. He has wounded two or three men and cattle,—Imám Dín, wife of Imám Dín, daughter of Imám Dín, and son of Imám Dín, and also 9 buffaloes, 2 cows, 1 sheep and some property. As Mukkaddas is one of your partizans and followers, and you maintain friendship with the British Government, Mukkaddas has only injured your reputation by his misconduct. You have control over Mukkaddas and the property and the persons seized by him in British territory. I write that with reference to your friendly relations with the British Government you will return the property and the persons. This will be attributed to your good name. As you are wise, I hope you will consider this matter immediately and return the property, so that your friendship may last for ever. You should make no delay in returning the prisoners and the property; otherwise it may result in the displeasure of the higher authorities.

TRANSLATION of a LETTER without date from ARSALA KHÁN of Allai to the TAHSÍLDÁR of Mansahra.

I HAVE received your letter and understood its contents. My kind friend, I adhere to my agreement regarding my old standing friendship, and I shall never infringe it. But I must receive timely notice and information (of all occurrences). I did receive information regarding the "kut" (orris root)

case of Mián Mukkaddas, but I do not know how it was settled. I heard that with the aid of Mada Khel Mián Mukkaddas had committed a raid and had brought Imám Dín, with his children, wife, property and cattle. I brought all these in my possession, and have severely censured and punished Mukkaddas and Mada Khel, and have called upon them for having committed the raid without my permission. It is stated that one Mada Khel has been killed and one wounded. I had delayed the release of the property and persons pending a receipt of a letter from you, and now that it has been received I have at once released Imám Dín, his property and people. No other person is concerned in the raid. I understand that by order of the Government Allaiwáls are being seized. This is not advisable because the whole of Allai is not concerned in the raid, and those who are not guilty should not be seized. This is contrary to justice and friendship. The Mada Khel are a separate tribe and live far from our country, and as soon as I received information regarding their raid I declared them guilty.

TAHSÍLDÁR'S reply, dated 17th July 1887.

I HAVE received your letter in reply to my communication by the hand of Azád. It appears that you adhere to your old existing friendship with the British Government, and on these grounds I wrote to you that Mukkaddas, one of your partizans, has, in the face of your friendly relations with the British Government, misbehaved, and that you should return Imám Dín and his property and family to me. This would verify your friendship towards the British Government. But Azád has returned without the captives and the property. You write that Imám Dín and his property, &c., have been released. I do not understand this. Have you obtained their release from Mukkaddas and detained them in your own custody, or have you allowed them to return to British territory? Perhaps you have detained them, and this was not my object. It appears that you have delayed their return and protracted the matter, and this may show that you have joined and helped Mukkaddas. I do not like that suspicions to the above fact may be attached against you and your old existing friendship should suffer, and I therefore send Azád again to you and write that you will consider all these points and will return the property and the persons. This will prove your goodwill and sincerity. It will be better if you will send two agents with the above property, and this will add to your honour. I hope that no further delay will be caused. This may result in the release of the Allaiwáls who have been arrested. There is no doubt in the justice and equity of the British Government, but some attention should be given to the gravity of the offence committed by Mukkaddas and Mada Khels. The case of Mukkaddas should be left at the disposal of the British Government, and the people and the property should be returned at once. This depends on your good faith. I do not think it advisable that in any matter which can be easily settled by direct communication between you and the British Government any deputation of Konsh, &c., should be allowed to interfere.

REPLY of ARSALA KHÁN without date, received on 24th July 1887.

WHEN your former letter was received by the hand of Azád Khán, I at once sent for a Mada Khel jirga and the property and the prisoners. I severely reprimanded Mukkaddas and Mada Khel, and the day Azád Khán took reply from me to the Tahsíldár's letter I sent back the Mada Khel jirga, and the prisoners and the property were made over to Azád Khán. I was surprised that the Allaiwáls had not yet been released, and am now glad to receive a happy letter from the Tahsíldár. I send Dost Muhammad, Jamál Khán and Abdul Majíd with the property and the prisoners.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 21st November 1887.

WITH reference to your memorandum of the 7th instant, asking when a report may be expected in reply to your memorandum of the 17th, regarding a raid in Bhogarmang led by Mukkaddas from Allai, it is necessary that I should first point out that your memorandum, dated the 17th ultimo, was not received here till the 4th instant, with your docket of the 31st October, and the vernacular files in the same case were returned to this office about the same time. As the raid occurred and the enquiry was made some months before I joined the district, I had to go through the entire vernacular file in order to understand the facts.

This I have only now been able to do, as I have lately had to submit several "further reports" in other frontier raids of July and August last.

2. Under your instructions I have written to the Deputy Conservator of Forests, and have asked him to enquire whether "kut" grows on the hills at the head of Bhogarmang within British territory. I understand you desire a jirga to be convened to settle the claim of Mukkaddas after Mr. Wild has reported on the preliminary question. As I have just received telegraphic orders to proceed to Pesháwar, on temporary duty, I fear it will be hardly possible to settle the whole case satisfactorily before snow again falls on the hills.

Action taken.

To save time I have directed the Tahsíldár to communicate with Mukkaddas and to call in five Allaiwáls of position to form a jirga in association with an equal number of respectable men of British territory.

I have sent for and seen Mastu and communicated your orders to him. He will stay in Shinkiari till the case is settled. The "kut" which Mukkaddas alleged to have been dug up in the Allai hills, but which Mastu claims to have bought from zemindárs and others in British territory, has been sold. As Mastu is a man of some property and owns houses and shops, I have not as yet taken security from him.

3. In consequence of the delay in receipt of your memorandum and of pressure of other frontier work it has been impossible, as explained above, to take action sooner, and I do not see my way to arriving at a decision by a irga until the end of December.

Settlement not expected till end of the year.

Meanwhile several points noticed in your memorandum can be cleared up. I have therefore the honour to make the following remarks with reference to the questions therein made.

4. The fact that any such claim had been put forward by Mukkaddas did not come before me till the end of January or beginning of February last, when I was in temporary charge of this district. On receiving a report from the Tahsíldár on this claim I sent for Mukkaddas, and as soon as I was free from work connected with the celebration of the Queen's Jubilee, I examined both him and Mastu with the result recorded in my order of 22nd of February.

Why Mukkaddas' claim could not be put before a jirga when first brought forward.

It will be remembered that the new Frontier Regulation had not then been passed, and there was no provision of law under which I could have obliged Mastu to pay damages even to half the extent of Mukkaddas' claim. As a jirga appeared out of the question, I felt compelled to refer him to a civil suit, which I told him might, under the circumstances, be brought *in formâ pauperis*. The claim was essentially one of a civil nature, and, though I am aware it is frequently possible by a little advice or pressure to settle disputes between foreigners and our subjects by jirga or "shariat," in this case the damages claimed were so large that Mastu would certainly have appealed from any order for execution of a finding by a jirga adverse to him, and no law then existed giving the required sanction to a jirga's decision in a civil case. His reply, too, appeared to me credible and reasonable, that is, that though he believed the "kut" to have been dug up in British territory, he merely bought it from day to day from zemindárs and others who brought it to his shop for sale.

At the same time I directed further enquiry to be made when the snow had cleared off the ground.

Damage done in raid.

5. The other questions I can only answer from the file of enquiries made by Mr. Thorburn after the raid in July. First, as to killed, wounded and mischief done. One woman was wounded and died. Three men were slightly wounded. About 60 buffaloes, 13 cows, bullocks, &c., about 120 sheep and goats and some personal property of small value were carried off, together with 1 woman and 2 children. This woman and children and the greater part of the cattle lifted were recovered through the exertions of the Tahsíldár of Mansahra, who appears to me to deserve credit for securing the return of about Rs. 2,900 worth of cattle and goods out of Rs. 3,585 alleged to have been carried off.

The property which was not recovered consisted of 9 buffaloes, 4 bullocks, miscellaneous personal property valued at Rs. 575 in all.

To this has to be added a sum of Rs. 110 on account of 1 buffalo and Rs. 60 cash paid by one Imám Dín Gujar, one of the principal sufferers, as ransom for the return of his cattle. This makes Rs. 675, to which must be added blood money for the woman who died of her wounds and for 3 men slightly hurt, or say about Rs. 1,000 in all. The raiders lost 1 killed and 2 wounded.

Mr. Thorburn's order as to the seizure of Mukkaddas and his abettors.

6. As to your remarks with regard to the seizure and release of Allaiwáls, it appears from the file that Mr. Thorburn at first (9th July) ordered the arrest of Allaiwáls generally, but afterwards on 19th July directed that only Mada Khels of the faction or following of Mukkaddas should be seized. On the first orders 57 men were arrested. These were soon after released, either because, as the Tahsíldár told me, they were really Nindaharís and Deshís who had been for some time resident in British territory, or because the Tahsíldár was then arranging for the amicable return of the property looted, and it was unnecessary or inexpedient to detain the men further. With regard to your remark that the order amounted to a partial blockade and was opposed to the policy of Government, I can only say that I understand Mr. Thorburn's order of 19th July to have been for the arrest of the family and immediate followers, aiders and abettors of Mukkaddas in his raid. This procedure is, I believe, common all down the frontier, whenever a raid is not the outcome of general hostility of a tribe, but the act of an individual in alleged redress of some fancied wrong: and I may point out that in dealing with the Bágrián case (11th July) in your letter of 12th September, you directed the seizure of Rahím Khán of Chirmang and his dependants, though certainly Rahím Khán and his followers are not an entire clan, nor even a tribal unit among the Swathís of Tikri and Nindahar.

Ransom paid.

7. A jirga from Allai was entertained at Mansahra, but it does not appear that any particular present was made to Arsala Khán. Imám Dín, as stated above, ransomed his cattle on payment of 1 buffalo and Rs. 60.

Letters to Arsala Khán.

8. The Tahsíldár has been told that you consider the style of his letters to Arsala Khán improper, and he has been warned to refer draft letters to Arsala Khán for approval in future. But in his favour it should be remembered that he actually did bring about the recovery of cattle, &c., worth Rs. 2,900 out of Rs. 3,585.

Our claim against Mukkaddas.

9. As noted above, the counter-claim of our subjects to compensation which will have to be considered is Rs. 675, including Rs. 110 paid as ransom, and Rs. 300 for 1 woman killed and 3 men slightly wounded.

In conclusion, I may note that, whatever Mukkaddas' claim may be, Mastu has himself suffered far worse at the hands of Allaiwáls among whom this Mukkaddas, Mada Khel, lives. They looted his shop years ago, kidnapped and carried off *him*, his uncle and his brother, murdered the uncle, nearly killed the brother, and gave Mastu a severe sword wound which has permanently disfigured, if not injured, his left arm. If the Allaiwáls in answer to the summons sent by your order send five men to adjudicate on

this case, and if Mukkaddas brings his evidence before them, the matter will be laid before a jirga as a civil dispute under the new Frontier Regulation (which it may be hoped will shortly be notified in such a way as to avoid all doubt of its legal force).

If "kut," which is known to be found in quantities in Khágan, is also shown to grow in the Bhogarmang hills within British territory, it will be difficult to disprove Mastu's plea.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 10th February 1888.

ON receipt of your demi-official of 4th, forwarding copy of a letter from Mr. Tupper about Allai affairs, I sent for the file of correspondence in my office and have gone through it. As far as I can make out, Mr. Tupper's letter sums up accurately the position as it existed in 1881 and as it is now.

For all action to enforce the terms imposed by Government on Arsala Khán for the Battal raid of November 1878 my file ends with the letter from Government of India, Foreign Department, announcing that the idea of sending an expedition had been deferred.

The terms imposed, as stated by Mr. Tupper, remain unfulfilled. After the Hindús had been restored by the Allaiwáls and the captured raiders released by us, the order* of Government was that the blockade should be maintained till the other terms were carried out. There is nothing in my office to show when or how the blockade ceased, nor can I find out why it was relaxed; but, as you have been Commissioner almost continuously from before the raid in 1878 till now, you may know more than I can learn from my records. No blockade existed when I came to this district temporarily in November 1886, and I have always supposed that, if not formally countermanded, it had practically been allowed to drop. In a memorandum written on leaving the district in August 1886, Mr. Fryer noted "the fine of Rs. 5,000 imposed "on the Allaiwáls for the Battal raid has never been paid, and its payment "is not insisted on now." When I returned to the district last September, I found that this, with subsequent district notes by Mr. Thorburn and myself, had been sent for and perused by you. You recorded marginal notes on other points, but none on the statement above quoted, which I inferred was correct, or rather, I should say, it appeared that though the demand had never been waived, active steps to enforce it were in abeyance.

* Telegram from Secretary to Government, 9th October 1880.

As a matter of fact, for some years past Allaiwáls appear to have come and gone in British territory without let or hinderance. After the raid on some Gujar graziers on the mountains at the head of the Bhogarmang Glen (4th July 1887), Mr. Thorburn ordered first the seizure of Allaiwáls generally, but later directed the arrest only of any of the family, followers or faction of Mukkaddas, which I take to mean the Mada Khel, living among, and in dependence on, the Allaiwáls.

The Swathís of Allai generally were not concerned in that raid, which was got up by Mukkaddas with his Mada Khel neighbours, aided, probably by some Gujar servants, to get satisfaction for an alleged claim for "kut" which was said to have been dug up, by theft from their lands on the further side of the border mountain range. The action taken in connection with this matter is fully explained in my letter No. 4311 of 21st November 1887 in answer to a memorandum received with your docket No. 4974 of 31st October (*not* 18th October). What has been said above as to the blockade ceasing to be strictly enforced will explain the presence of Allaiwáls in British territory in July last, but I should note that it appears from the vernacular file that most of these men turned out to be Nindaharís and Deshís; that at least was the Tahsíldár's report, and that was the ostensible ground for their release. I am inclined to think that some of them may have been Allaiwáls, but the Tahsíldár was endeavouring to arrange with Arsala Khán for the amicable return of the stolen cattle, and was perhaps not keen to keep the men in detention. I have seen a few Allaiwáls both

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last year and this, men who have come with various more or less unreasonable requests; but I have always refused special assistance and reiterated to them that, as they had not made submission nor paid the fines imposed for the Battal raid, they could not expect specially friendly treatment.

Having explained the existing state of things as well as I can, I venture to add a few remarks as to what seems the best course to pursue:—

I. Though the blockade imposed in 1879 has for some years past been in abeyance, nobody supposes that Government has waived its demands; nor would Arsala Khán pretend that his offence had been forgiven or condoned.

There are already sufficient unrealized fines hanging over the tribes beyond the Hazára border, and it would probably be well to remind them of debts which they may otherwise begin to think are barred or forgotten.

There is no reason why later in the year, when the snows have melted and the passes are open, a satisfactory "birampta" or seizure of Allaiwáls should not be made; but both because Arsala Khan's language for some time past has been more conciliatory, and because for some years nothing has been done, I would before taking any step write and remind him that the fines remain unpaid. He is not likely to pay up; but as Government in 1879 and 1880 distinctly stated it would choose its own time for enforcing submission to its terms, the Allaiwáls must perfectly well know their responsibility. No money need be spent on a blockade. In fact, the first seizure effected would act automatically, and keep Allaiwáls out. After that the inconvenience of being cut off from the larger markets in the interior of Hazára whence they get articles unprocurable in the smaller border villages, if this inconvenience were made to be felt by patiently blockading them for a couple of years, would probably bring about at least the payment of the fine imposed. Colonel Ommanney's letters No. 16 C. of 23rd May and No. 19 C. of 18th June 1879 throw some light on this matter. The blockade I contemplate is such as he proposed, and if carried on with sufficient patience would probably be successful.

It is only for luxuries that the Allaiwáls are dependent on us. The necessaries of life they can get elsewhere; but I think with Colonel Ommanney, than whom nobody knows the Hazára border better, they would come to their senses if they were cut off from British markets for some years.

A considerable trade has sprung up in "kut" (the root of the *Aucklandia costus*) which is exported from Allai and Northern Hazára to Kashmir, India, and eventually, I believe, to China. To make them feel the loss of this it would be necessary to debar Kashmiri and British merchants from importing it from Allai.

II. It may be doubtful whether after the inaction of the last few years it would be advisable to take any sudden step which would irritate the Allaiwáls until the Khán Khel Hassanzai are punished or settled with for their offences in Agror; but the least sign of determination to deal with them will bring about the submission of Tikri, of the Sayads and Chigarzaís of Parári; and that would doubtless induce the Allaiwáls to begin to think of making terms with Government.

III. The only fear to be apprehended from Allai is of course that they might repeat small raids like that of Mukkaddas. These are difficult to prevent, because in the summer months Gujars squat and graze their cattle on the pathless mountains at the head of Bhogarmang which are almost inaccessible from Abbott-abad. As for the villages of Konsh and Bhogarmung, they can be protected by rifles being distributed among the villagers.

On going into the question of the state of defence of these villages lately, I found that Samundar Khán, Honorary Magistrate, had kept stored up in his Málkhána at Garhi Habibulla all the rifles and most of the carbines which were given him for border defence in years succeeding the Battal raid. As Garhi is 20 or 30 miles from the villages where these arms are wanted, I insisted on his disgorging and distributing them. A hundred more rifles in Jabar, Deoli, Khori, Jabori would effectually protect Bhogarmang and close the roads to raiding parties from Allai in that glen.

IV. The other difficulty is the sympathy and kinship which exists between our own subjects and the Swathís beyond the border.

This may been seen throughout the reports of 1879–80. In paragraph 2 of his No. 196 of 18th June 1879, Colonel Ommanney stated that Samundar Khán, our jagírdar, and Ashraf Khán, the headman of Battal, were in that village at the time of the raid, "*but were not molested*," and now ten years after the event I have heard it asserted by men of all factions and by Samundar Khán's own agent that Ashraf Khán received from the hands of Arsala Khán a turban of investiture as the successor to his father who had recently died. This sympathy with their kinsmen beyond the border might enable Allaiwáls to come and go in safety, but I have no doubt that Colonel Ommanney was right, and that in the end a blockade if patiently enforced would secure parts of the demands of Government. Samundar Khán is crippled both by old age and heavy debts, the result partly of personal extravagance and partly of expenditure in and among Trans-border clans to further his own ambitions in days past. Unless he were led astray by stronger or more ambitious minds he is not likely to move from his partial retirement; and, on the other hand, his power for active usefulness on the border is lessened, but the villages of Konsh and Bhogarmang could protect themselves if properly armed. I have only applied for 200 out of the 300 rifles which I was authorized to get for Agror, and shall hereafter probably ask sanction to distribute 100 in Konsh and Bhogarmang. Meanwhile to secure some protection I have made Samundar Khán distribute 94 rifles and about 70 carbines which were rusting in Garhi Habibulla.

V. The only point that remains to be noticed is that Arsala Khán's position is not nearly so strong now as it was ten years ago. He has a formidable rival in Bahádur Khán of Shakargali, who, assisted by the Kohistánís, inflicted an indecisive defeat on him in the end of January. Arsala Khan's party was worsted in some comparatively severe fighting (for Swathís) near Thakot about a year ago, and he has since alienated many of his supporters by the treacherous murder of two Maliks of importance who were invited to a conference and shot down by an ambuscade. The whole correspondence of 1879 and 1880 strengthens my belief that in most border complications the chief difficulties to be met with are those which arise in our own territory. Our own Kháns and border Maliks are too prone to "exploit" these clans for their own advantage and in the hope of bringing themselves to notice for "frontier service," and much good would ensue if proof of such intrigues could be brought home and the delinquent punished as a warning to others.

ENCLOSURE No. 18.

From SECRETARY to GOVERNMENT of INDIA, to SECRETARY to GOVERNMENT of the PUNJAB, dated Fort William, 28th March 1888.

I AM directed to acknowledge the receipt of your letters, cited in the margin, on the subject of the Hazára border.

Dated the 19th December 1887, 26th January, 28th January, 2nd February, 6th February, 20th February, 7th February, 28th February, 24th February, 25th February, 3rd March, and 15th March 1888.

2. These papers deal with a series of offences extending over a period of several months; and the Lieutenant-Governor holds that the condition of the border, as exemplified by the offences, is very unsatisfactory; and that the prestige of the British Government has fallen to a low point in Agror and in other parts of Hazára. His Honour therefore asks the Government of India to consider whether a punitive expeditition should not be despatched against the Khán Khel of the Hasanzai tribe and the Parári Saiyads.

3. In reply I am to state that after careful examination of the correspondence the Governor-General in Council is unable at present to find sufficient justification for resort to a military expedition. The offences reported are petty in themselves, and seem to have been rather the lawless acts of individuals than the results of any general hostility on the part of the tribes. Experience has shown that an expedition against these tribes may turn out to be a serious matter. In all probability it would be found

practically impossible to detach the Khán Khel from the other sections of the Hasanzai, or the Parári Saiyads from the Chigarzaís, and the first shot fired might be the signal for a combination of the tribes. The demand for the surrender of Háshim Alí Khán, the Hasanzai Chief, is one which the Government of India thinks would be peculiarly difficult to enforce.

4. The Governor-General in Council is on the whole of opinion that the best method of improving the condition of the Hazára border lies in a patient adherence to the policy which was laid down many years ago, and has hitherto been pursued with considerable success. The Oghi post and garrison should be strengthened. The villagers should be roused again to a sense of their interests and responsibilities. Men of proscribed tribes found in British territory should be expelled or shot, unless they come as a deputation to sue for submission. A strict blockade should be maintained both on our own side and through the Nawáb of Amb; and no eagerness to make terms with the tribes should be displayed.

5. The Governor-General in Council observes with regret that the Khán of Agror, who so recently received a jagir of Rs. 2,000 from the British Government, has fallen under suspicion of dealing disloyally in connection with the affairs of the frontier, although he is bound to do all in his power to keep the peace there. His attitude and that of his agent, Fazl Ali, may have caused complications; but the Government of India is not as yet in possession of precise evidence against them. The Khán has been summoned to Abbott-abad, and his agent has been arrested; and thus the disturbances on the border, if due to them, may be expected to settle down. It is understood, however, that a separate report will be furnished later after evidence has been recorded, and the Government of India will await it before passing any orders on the case as affecting the Khán.

Enclosure No. 19.

From Officiating Secretary to Government, Punjab and its Dependencies, to Secretary to Government of India, dated Lahore, 3rd May 1888.

I am directed to acknowledge the receipt of your letter, dated March 28th, 1888, on the subject of the Hazára border, stating that the Government of India is unable at present to find sufficient justification for resort to a military expedition, the offences reported being petty in themselves, and seeming to have been rather the lawless acts of individuals than the results of any general hostility on the part of the tribes.

2. In reply I am desired to submit a note written by His Honour the Lieutenant-Governor containing remarks on your letter, and proposals for securing the safety of the exposed frontier of the Agror valley. Further correspondence, as marginally noted, which has not yet been communicated to the Government of India, and which is referred to in the Lieutenant-Governor's note, is also forwarded.

Commissioner Pesháwar's letter, dated March 31st 1888, and enclosure.
Commissioner Pesháwar's letter, dated April 6th 1888, and enclosures.
Commissioner Pesháwar's, dated April 10th 1888, and enclosure.
Punjab Government letter, dated April 10th 1888.

Note by the Lieutenant-Governor.

Before receipt of the Foreign Secretary's No. 609 F. of 28th March, the measures ordered in paragraph 4 of that letter had already been either actually taken or had been sanctioned by this Government.

The Oghi post and garrison had been strengthened; the villagers had been armed and roused as far as possible.

The Parári Syads, with their Chiggarzai tenants concerned in the raid on Bhágrián and the murder of Núr Jamál, also the Tikriwáls concerned in the same raid, had been ordered to pay fines, and were practically blockaded.

The Commissioner had been told that whenever he considered it quite

clear that the jirga of the Hassanzaís had no intention to exert themselves to effect the release of the two kidnapped men held prisoners by Háshim Ali Khán, but had, on the contrary, in effect declared themselves on his side in the quarrel, he (the Commissioner) might at once enforce a blockade against the whole of the Hassanzai tribe and demand the co-operation of the Nawáb of Amb.

2. In agreeing to this blockade of the Hassanzai tribe I regarded the measure as one advisable to be taken to mark at once our dissatisfaction with the attitude taken by their jirga, and to show that we were prepared to act on the announcement formally made to the tribe in 1884 that any future outrages committed by Háshim Ali would be treated as tribal offences. But, though I hoped that the blockade might have some immediate effect in the direction of creating disunion between Háshim Ali and the main body of the tribe, and might even induce the tribe to recover and return the two kidnapped men, I had no hopes that it would of itself secure a satisfactory settlement of the case against Háshim Ali Khán. I therefore regarded it as a preliminary measure only, which would certainly have to be supported, at some convenient time, by the collection of a force on the frontier, and in all probability by the use of such force across the border against Háshim Ali and his section of the tribe, and of course against all who joined his standard to protect him.

3. In the orders received, however, my view of the situation has been overruled. It is held by the Government of India that no sufficient justification for a military expedition has been shown, and that a blockade of the tribes concerned will meet the urgency of the occasion, and, if patiently and strictly maintained, may be expected to bring about a satisfactory settlement.

I have accordingly directed the Commissioner and Deputy Commissioner to enforce without further delay a strict blockade and to report thereafter the arrangements made, and I have let them know that this method of procedure is approved by the Government of India, and that for the present all idea of using troops for offensive purposes must be given up or at least suspended. But, for the following reasons, I have not yet sent copy of the Foreign Secretary's letter to the Commissioner and Deputy Commissioner.

4. This letter states, as reasons for finding no sufficient justification for a military expedition, that the offences reported are petty in themselves, and seem rather the lawless acts of individuals than the results of any general hostility on the part of the tribes. I venture to respectfully protest against this description, which to my mind implies a misappreciation of the real character of the offences and of the position of the chief offenders. I think it very undesirable that it should go out, not only to our frontier officers, but to the people on both sides of the border (for this case alone shows that the purport of orders passed is known very quickly), that offences like those of Háshim Ali Khán are considered to be petty and not sufficient to justify the severer forms of action against the tribe.

5. Háshim Ali Khán succeeded to the Khánship in February 1880 in consequence of the murder of his brother, Ahmad Ali Khán by their grand-uncle Feroz Khán. Feroz Khán and his son Ibráhím fled to Sherghar, a border village in Tannawal, the Nawáb of Amb's country, and Háshim Ali has never dared to attack them there; but he was withheld by no such fear in the case of Agror (the Khán of which valley is at once his own cousin, his wife's cousin, and his brother-in-law), and accordingly we find that so early as in March and April 1880 he sent two nocturnal raiding parties into Agror with intent to retaliate by killing either Feroz Khán's son-in-law, Mozaffar Khán of Kolakka, or his nephew, Gholám Kádir of Belián. These raiders failed to find the men they wanted, but killed three innocent British subjects who came across them. These attempts of course put the intended victims very much on their guard, and though there are indications that Háshim Ali remained on the watch for an opportunity, he does not seem to have found one till the 28th March 1883, when he made a descent on Kolakka at night with a band of his kinsmen and tenants numbering some 120 to 140 persons and assassinated Mozaffar Khán and his brother, killing also two of their servants. Háshim Ali, on being written to by us, accepted the entire responsibility for these murders, which he attributed solely to retaliation for his brother's murder by Feroz Khán, and went

Colonel Hastings, Deputy Commissioner, No. 123 P. of 16th April 1883.

out of his way to pointedly assert that he had no aider or abettor in Agror. Opinion in Agror at the time was, however, in favour of a less simple explanation: it considered that the murderous attack was chiefly due to the instigation and connivance of the Khán of Agror, who was also at feud with the deceased. Colonel Hastings, the Deputy Commissioner, did not think this proved, though he considered that there were strong grounds of suspicion. The Nawáb of Amb, who was consulted by Colonel Waterfield at the time, and who was in the best possible position to judge, imputed these Kolakka murders to three causes,—(1) Háshim Ali's desire as a new chief to make a name; (2) his wish to retaliate against Feroz Khán; (3) his wish to please the Khán of Agror by killing his enemies.

Colonel Waterfield, Commissioner, No. 2198 P. of 16th June 1883.

Colonel Waterfield had no doubt at the time that the Nawáb's explanation was correct, and it may be noticed that when a year or so later some of the Black Mountain tribes took up the case of Abdulla of Dilbori against the Khán of Agror, their jirgas in some of their communications asserted, as if the fact was notorious, that Háshim Ali was the instrument of the Khán in the Kolakka murders.

I lay stress on these points here to show that Háshim Ali's conduct in the Kolakka case should not be considered a mere ordinary blood feud matter. He let Feroz Khán, the real murderer of his brother, alone, though he was in an equally accessible situation, and so far as can be judged attacked Kolakka from a mixture of motives, which makes the invasion of our territory and the crime itself much less excusable both from our point of view and from that of his own countrymen.

It being thought advisable not to attempt to enforce tribal responsibility, Háshim Ali was fined Rs. 2,000 for the four murders in Kolakka and for the three others which had preceded them, and was told that he would be treated as a murderer if caught in British territory unless he paid.

He replied defiantly that he would not pay and would repeat the offence if he thought proper. In the five years that have followed he has not attempted to make any amends, and now that one of his servants, Turabáz (a proclaimed outlaw for his part in the Kolakka raid and for several other murders and robberies in our territory), has been arrested, he has again raided in force into our territory, attacked an unoffending hamlet, killed two of our subjects, and carried off two more, whom he threatens to kill unless we release Turabáz.

6. I feel it a duty to strongly protest against these acts of Háshim Ali Khán's being classed as petty offences. They are acts against the Government of a kind which would bring on a war between Great Powers unless redress was promptly accorded. They are also murderous outrages of the worst kind against which we are bound by Asiatic as well as by European ideas of the duty of a Ruler to protect our subjects even at great risk and cost to ourselves. The same may be said in a minor degree in regard to the shooting down of the unoffending Núr Jamál on the 21st August last by the Parári people. This case and their raid in the preceding month on the cattle of Bhágrián (in which two British subjects were killed) were not ordinary border offences arising from lust for plunder, blood feuds or quarrels about women between Trans-border people and their neighbours in our territory. They were both political moves of a kind made by leading men either against Government on behalf of Abdulla Khán as was at first supposed, or, as seems indicated by later information, at the instigation of the Khán of Agror to injure and intimidate those who dared to be independent of him.

And in both Háshim Ali and the Parári Syads' cases I can see nothing in the individuality of the actual offenders to make it doubtful whether we should be justified in acting against the tribes collectively, not only by way of blockade as has been agreed, but also by military operations. The raiding parties from the Parári country seem to have been clearly organised and sent out by the leading Syads. If, therefore, payment of appropriate fines cannot be obtained otherwise in a reasonable time, the use of force against the country generally would be quite justifiable if convenient. This is all that has ever been proposed in this case. In the other, Háshim Ali is the admitted chief of the whole Hassanzai tribe, though his authority is slight except in his own Khán Khel section, which actively aids him in his raids. When,

however, in so just a quarrel the jirga of the whole tribe tells us that if we attack the chief and his section the other sections will not stand neutral, but will attack us, and when the jirga refuses to recommend the chief to release the men he has kidnapped unless we first release our prisoner of justice, I can see no shadow of reason for hesitating to attack the Khán Khel section merely because we may find the other sections determined to assist it against us, and do not accuse them of actual prior complicity in the offence.

7. Another reason why I have kept back the Foreign Secretary's letter for the present is that it declares distinctly for the policy of a patient, long-continued blockade. I wish the question of using force in October next, if the blockade produces no effect by that time, to be considered, and in any case I recommend that nothing be said to the contrary, and that we should declare only for a trial of blockade as a first measure.

8. Seeing, however, that for the present at all events we are proceeding by blockade, I think terms of settlement should now be fixed in advance for the Hassanzaís as has been done already for the Parári Syads and Tikriwáls. The demands we must make on the Hassanzaís must of course be very moderate in character, based not so much on our view of the heinousness of Háshim Ali's offences as on our estimate of what the tribe may possibly be able and willing to accept in preference to the continuance of the inconveniences of a blockade. Unconditional surrender of the kidnapped men and compensation to them and the relatives of the murdered men, and a rather heavy fine, seem the utmost practically demandable. Surrender of Háshim Ali Khán, or his actual expulsion from the chiefdom or from Seri, would be terms the announcement of which might uselessly stir up the resentment of the tribe, and which I think it would be clearly impossible to secure by such process as blockade alone. Háshim Ali already owes us a fine of Rs. 2,000. Another Rs. 3,000 for fine and compensation for the Udigraon case would be, I should say, the most we could hope to realize.

9. I think myself that if we succeed in recovering the kidnapped men and exacting this fine the punishment will still be inadequate and hardly of a character suitable to the occasion. We risk losing the respect of our subjects if we carry beyond a certain point the system of accepting blood money as sufficient amends for their lives; but at the same time so long as we proceed by blockade alone I do not think we ought to demand more. On the other hand, I do not think we ought ever to accept less unless the tribe of their own accord propose to substitute for part of the fine the banishment of Háshim Ali beyond the Indus for a term of years and give us real security for its fulfilment.

10. I think it right to say that I myself apprehend that we shall fail to get even these moderate terms by blockade only, and that I fear that in dealing with these Black Mountain tribes a blockade of long continuance in an effective form will be found more troublesome and injurious to ourselves and to our subjects, including the Nawáb of Amab and the Tannawal people, than to the Hassanzaís. The trouble, anxiety and injury to our own subjects involved in long blockades are not, I think, always sufficiently considered by authorities at a distance when deciding between the policies of peaceful blockade and of military expedition. Our own people are limited to defensive action, while the party across the border enjoy and generally freely use offensive tactics also. A long blockade is often a great strain on the loyalty of our own people and on their spirit of contentment with our methods of government. In the present case the Nawáb of Amb will also be put to much expense and trouble.

For these reasons, I beg to ask the Government of India to now consider whether, if by the end of August blockade alone appears likely to be unsuccessful, preparations should not be made for military operations to be commenced in October.

11. In support of this view I forward correspondence subsequently received which has not yet been seen by the Government of India, in which the question of military action is discussed by the Commissioner and Deputy Commissioner. It will be seen that both officers appear to think that a military expedition will be desirable in Háshim Ali's case, though Colonel Waterfield takes a more hopeful view of the chance of success by a blockade and gives general reasons for disapproving the policy of expeditions, with some

of which I do not myself altogether agree. Patience is no doubt most necessary in dealing with these people, and blockades are most useful when they can be effectually applied. When patience should end, however, and when the use of force is required, are questions of judgment. We have certainly not been hasty in exacting redress from Háshim Ali Khán and the Khán Khels. I do not admit that submission exacted by force always or even generally produces a worse state of feeling between our Government and these people than submission exacted by a long blockade. Without denying that force, if it has to be extended to the destruction of crops and houses, excites bitterness and resentment, I assert that the degree and duration of these feelings are far smaller than might be imagined, provided that our cause of quarrel is known to be good and that we are not hasty in action. Hardness of heart and of body are the qualities which these people most admire, and superior force is the thing they most respect. I believe that when by just severity we have compelled them to respect us, they hate us less than when by what appears to them softness or weakness we have excited their ignorant contempt. It should be remembered also that we have our own people's feelings to consider as well as those of their neighbours across the border.

12. In regard to plan of action, number of troops required, and opposition to be expected, the Deputy Commissioner's proposals and opinions seem to me, so far as I can judge, to be judicious and reliable; but Colonel Waterfield is probably right in thinking Mr. Cunningham too sanguine in his expectations of submission by some of the tribes without fighting, and of the time which the force would have to remain across the border. But, though the affair might not be a small one, I do not anticipate that it would prove really formidable. I regard it, in fact, as far less formidable than the expedition contemplated against the Bonerwáls in 1886, while our *casus belli* is in this case a much better one. The Boner trouble began with a raid due to the abduction of some women by men in our villages. In spite of the outrages which subsequently followed, it was, I think, a case to be patched up leniently.

13. The Khán of Agror is at present detained in Lahore, and I am not yet ready to ask the Government of India to pass orders in his case or in that of Fazl Ali. I have asked the Commissioner and Deputy Commissioner to excerpt and bring together all the evidence there is against them separately with as little delay as possible, and to submit proposals. But it is evident that the present decision not to use force across the border and to proceed by blockade only makes it all the more necessary to act strongly and promptly in Agror itself. Whether or no the case against Ali Gauhar Khán be ultimately found strong enough to justify his prosecution or his permanent removal from the position of Khán or Chief in Agror, it is already abundantly clear that in his defence of the valley and in his conduct of political relations with the neighbouring tribes he has failed entirely, and must always be unreliable. His very close relationship with Háshim Ali Khán and the Khán Khels, which was one of the reasons for preferring him to his elder brothers, has proved in this, as in other similar cases on the border, a fatal objection to his usefulness.

The Khán has, for some time past, maintained a partly disciplined levy of armed retainers, and the Government of India will recollect that a remission of revenue or jágír of Rs. 2,000 was recently granted him by Government to help him to pay this levy and increase its strength. This levy is reported by the Deputy Commissioner (*see* paragraph 2 of his No. 4 C. of 26th ultimo) to consist of 102 riflemen and 9 bandsmen. The Deputy Commissioner reports that they are unreliable and a source of anxiety to him; and, with the concurrence of the Commissioner, I have already allowed him discretion to disarm all or any of them as he may find necessary. Under the circumstances I think it unadvisable for the Government to continue to assist the Khán to maintain this levy, and I recommend that the jágír or remission of revenue granted for the purpose be resumed with effect from the next autumn, notice being given to the Khán so that he may be able to make arrangements to reduce the number of his retainers accordingly. On the other hand, I beg to strongly recommend that the Deputy Commissioner may be authorised to at once entertain a Border Militia for the defence of the Agror Frontier up to a cost of say Rs. 4,000 per annum. The measure would be a temporary one at present, but I have little doubt that it will be required for some years

at all events; certainly for so long as he blockade may last, and a satisfactory settlement with the surrounding tribes be not arrived at, and shown by experience to be likely to be lasting. So many of the Khán's levy as may be thought really reliable may be enlisted in this Militia if they wish to serve in it and to leave the Khán's service.

14. Looking to the peculiar position which the Chief of Agror holds in the valley, I do not think it will ever again be right to assist Ali Gauhar Khán, or any other member of the family who may hold the office, to keep up a small army of armed retainers absolutely dependent on himself alone. At the Land Revenue Settlement, in accordance with a policy which the officer who initiated it has since told me he feels was a mistake, the Chief was held to be absolute proprietor of most of the valley. A man of his race and class in such a position almost inevitably dislikes all who as small proprietors or occupancy tenants are more independent than his tenants-at-will. It is not in my opinion fair to these men or good policy to help the Khán to overawe them more completely. It seems to me to be in the nature of things that under the system which has prevailed lately our Courts and Police must have been as weak in Agror as the Deputy Commissioner believes them to have been.

15. In the face of the events of the last six months the Khán cannot deny that he has failed to secure the peace of the valley. His want of inclination to assist, if nothing more, is patent from his conduct at the time of Turabáz's arrest and from numerous other indications. It is, I believe, the universal opinion in Hazára that his influence with Háshim Ali would have brought about by this time the release of the kidnapped men if he had chosen to exert it. After the Kolakka raid he was warned, in accordance with the instructions contained in paragraph 8 of Secretary to Government Punjab's No. 361–1197 of 9th July 1883 to the Foreign Secretary, that his *raison d'être* as Khán was to maintain peace and render assistance to Government. The terms in which this warning was given to him by Major Hastings, Deputy Commissioner, should be read as well as Major Plowden's report of the little attention he paid to it. They are given in the correspondence marginally noted, which appears in the printed Foreign Proceedings of the Punjab Government for March 1884.

Paragraph 3 of Major Hastings' Rubacar enclosed in Commissioner's No. 96 C. of 12th October 1883 to Government, Punjab.

Major Plowden's Memorandum, forwarded with Major Hastings' No. 510 of 24th December 1883 to Commissioner, Pesháwar.

The Khán has in fact had ample warning, and his failure is sufficiently proved to justify the only measure which I propose to take to his disadvantage at present, and which I do not propose as a punishment, but as a measure which seems necessary for the security of the valley, and to meet in part the cost of the proposed Border Militia of the valley.

21st April 1888. J. B. LYALL.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 31st March 1888.

IN continuation of previous correspondence, I have the honour to forward in original a letter, of the 26th instant, from the Deputy Commissioner, Hazára.

2. The distribution of Government arms amongst the villages in Hazára by former and the present Deputy Commissioners of Hazára appears judicious. Arms could not be safely placed in the hamlets occupying the slopes of the Black Mountain. There are, as the Deputy Commissioner, Hazára, shows, 231 Government rifles and 65 Government carbines in the hands of the Agror villages with 38 rifles and 65 carbines in reserve for distribution, besides such arms of native manufacture as villagers usually possess.

3. In the absence of the Khán from Agror, I advise that the Deputy Commissioner be allowed full discretion to recall from all or any of the Khán's retainers the Government weapons with which they may have been armed. But these men have been well trained and drilled, and the Deputy Commissioner should satisfy himself of the uncertainty of their temper before he deprives himself of their services. It will be recollected by Government

that the Swatís of Agror have, during recent years, defended these villages with marked success against their independent Pathán neighbours, and I am inclined to think that they will do so again if well organised and supported.

(Confidential.)

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 26th March 1888.

IN connection with previous correspondence I have the honour to submit the following report of the measures taken for the defence of the Agror Valley, and for convenience sake give it in a separate letter.

Putting the Khán's own retainers out of sight for a moment there were till lately 69 Enfield rifles and 119 carbines (smooth-bore) in the hands of chosen men in the border villages. Under authority from you I procured 200 more Enfields from the Arsenal at Ráwalpindi and have distributed 162 of these so far among the following villages,—Kulakka, Dewal, Belián, Jaskot, Ghaniyán, Bhágrián. The statement appended to this report will show the distribution now made, the villages being entered in their order from south to north. The principles on which these arms have been distributed are (1) to give them to villages on the border, (2) to proprietors, landlords (or wárises), partly for the obvious reason that these are villages generally selected for attack, and partly because the landowners in these villages are the class who can best, or perhaps under present circumstances can alone, be relied on to use the arms effectively. Moreover, they are the class whom experience in the past has shown to suffer most at the hands of Parári, Akazai or Khán Khel raiders. These villages have now 231 Enfield rifles and 65 carbines. A glance at the Map will show that they lie at the foot of the hills in a ring round the west and north sides of the valley.

There are many small hamlets lying above them on the slopes and spurs of the Black Mountain, such as Chakbat, Shahto, Sambalbot, Chejri, Guldheri, Bholu, &c., and there are others at the foot of the hills in the plain, such as Kewal, Manewal, Dab, Nawagarhi, Kotla, &c. These nearly all belong to the Khán in proprietary right. The residents are his tenants. Many of them are Hasanzaís, Akazaís, others are Bangash and of miscellaneous clans. There are many reasons why it is inexpedient to give rifles in hamlets like these—

(1.) They are small and might be overpowered before assistance would arrive.

(2.) In any case the Hasanzai and Akazai could not be trusted, nor the Bangash, whose brothers and cousins live as servants and tenants of the Khán Khel on the other side of the Black Mountain. They are all ready to play the spy in Háshim Ali Khán's interest.

(3.) Being only tenants-at-will, there is little security these men would not go off with rifles; and under the present circumstances the Khán's tenants are hardly to be trusted in any case.

The statement shows 54 carbines have been taken back in exchange for rifles now given out, and that there are 38 rifles in store in the Thána. I have not distributed these yet, but propose to give some to villages in the interior of Agror, which are called on to send assistance in case of raids in force on the border villages.

I should note that the men in the following villages to whom rifles have been given are not proprietors, but there are special reasons in each case—

Jaskot.—These men, though tenants of the Khán, have rights of occupancy.

Kulakka.—These men are not landlords. The leading men are brothers of the Maliks who were murdered by Khán Khel in a raid on Kulakka in 1883, at the instigation, it is believed, of Fazl Ali Khán.

They gave evidence against Turrabáz in the recent trial which raised the whole slumbering Agror question, and they are therefore specially marked out for vengeance.

Dewal.—In this case the rifles have been given to a Sayad and his followers as an experiment.

There are then 231 rifles and 65 carbines in the hands of villagers, the majority of whom can be trusted to use them. There are 38 more rifles and 54 more carbines available, making a total of 388 good weapons, to which may be added match-locks and flint-locks, in these villages in the interior of the valley, which are about as good as what the Hasanzai or Akazai could bring against Agror.

2. To these should also be added the Khán's armed retainers—his so-called company: this consists of 102 riflemen (including officers) and 9 bandsmen.

Under existing conditions very little reliance can be placed upon them; in fact they are a source of considerable anxiety to me for the following reasons:—

(1.) If it be, as I know it to be, not merely an open secret, but a matter of notoriety that the Khán has been in league with our present enemies and those who for years past have given most trouble on this border, such as Háshim Alí Khán, the Akazai of the faction of the sons of Zaríf Khán, Miyán Said and Muhammad Ali Sháh, that he has now connived at, now instigated, their actions for his own objects, it can easily be understood how little his servants are to be trusted. His retainers are not landowners, but tenants-at-will, or servants paid for occasional service by small allotments of land.

(2.) The conditions of their service make it impossible to regard them as available for regular continued work in fixed posts. Many live by farming their allotted strips of hill land, others get cash rents, but have to eke out a livelihood for themselves.

(3.) Out of 100 men, 21 belong to the Black Mountain clans, 22 only are Swatís, 31 are Tanolís, 11 Gujars; the rest are a mixture of all kinds,—26 men representing 14 races or clans of British or foreign territory.

Whatever view Government may take of the probabilities as to the Khán's past conduct and present inclination, these Hasanzai and Akazai in the "company" must be considered useless or worse; and there are other Deshís, Bonerwáls, &c., little better.

3. Out of the nominal strength of 100, 20 men remain as before in Dilbori, the rest I have sent for the present to Sambalbot and Barchar. A glance at the Revenue Survey Map will show the object of this. These hamlets lie above Belián and Dewal on spurs of the Black Mountain, and past them run the best tracks or routes from the crest of the range to Agror. Here these men are out of the way of doing mischief, and though they cannot be trusted to oppose raiders, yet they may find it necessary for decency's sake to fire a shot which would warn the villagers below. It is difficult to know what to do with them. In my opinion the Hasanzai, Akazai and some others among them should be disarmed; but as the Khán has been summoned to Lahore and the question of his loyalty is on its trial, so to speak, I have avoided doing anything which might commit Government either way, or increase the appearance of distrust. At the same time, both from what I knew before and have reported, and from further information picked up since my arrival in Agror, I have no doubt whatever that the Khán has himself regularly and consistently aided and abetted the enemies of Government on this border, and that his men are not to be trusted.

At present the chief fear is lest these men in Sambalbot or Barchar should by previous concert pretend to be attacked at night, surrender their rifles and allow some of their number to be carried off. The loss of the men would be nothing,—a sham attack, a sham defence, and a sham capture would be arranged beforehand,—but the loss of rifles would be serious. At best they are a difficulty; and as there is talk of an attack on them, the wisest course will, I think, be to concentrate the whole number (80 rifles) at the Sambalbot village on the spur above Dewal. Here they have a strong defensible position, can run up a "sungar" or stone breast-work, and in a few days a tower can be built which will make it impossible for them to pretend or simulate defeat by any number of raiders.

If it will not embarrass Government in dealing with the Khán in Lahore, I should be glad to receive some measure of discretion as to how to deal with the elements of his "company," which are least to be trusted with

rifles. There is no telegraph line to Oghi, and it might be necessary at any time to act on my own responsibility to save the rifles; but any one who has read the correspondence on Agror affairs will understand that so far as is possible I desire to take no step of which the Khán can complain. In this matter early orders would assist me, as I am carrying on the *status quo* with some difficulty.

4. If the Khán's retainers could be trusted I should look on Agror as safe enough against any number of men whom Háshim Ali could bring down at present; but while Ali Gauhar Khán is landlord of seven-tenths of the valley, absolute master of the fortunes of the bulk of the population, and in especial of the tenants who inhabit the small hamlets on the border, there will be small ground for confidence.

In the second statement hereto appended I give a rough list of the numbers of men belonging to the Black Mountain clans who cultivate land in these hamlets as his tenants. For all practical purposes the Bangash and Sayads may be considered in the same light as Hasanzaís or Akazaís. Many Bangash are similarly settled on the other side of the mountain as servants and dependants of Háshim Ali Khán and others. One brother lives here under the Khán of Agror, one on the other side under the Khán Khel. The Sayads are allied to the Sayads of Tili, &c., and they are entirely in sympathy with our opponents. There is not a village or hamlet on this border which has not in it men who either from clannish fellowship or ties of marriage or fear of future injury would not secretly befriend the enemies of Government, whether Hasanzai, Akazai, or Parári; even the well-disposed, *i.e.*, the majority of the Swati landlords, are afraid of displeasing him. Kulakka, Ghaniyán, Bhágrián all prove that Háshim Ali Khán or his fellows are sure to take their vengeance while the deaths of their victims remain unavenged. If the Khán of Agror were loyal, or even not in league with their hereditary enemies, or if respect for the lives and property of British subjects were once enforced by action more effectual, and therefore in the end more truly merciful and economical than the formal announcement of fines to be paid on the top of ancient fines still unpaid, then no doubt the Agrorwáls would defend their border with spirit and success.

Distribution of Government Arms in Border Villages, Agror.

No.	Village.	Arms extant.		Additional Rifles.	Carbines taken back.	Result.		Remarks.
		Rifles.	Carbines.			Rifles.	Carbines.	
1	Kulakka	—	—	10	—	10	—	The Khán's retainers—100 rifles, and 25 sowárs—are now distributed as follows:—
2	Kewal	—	18	—	—	—	18	
3	Dewal	—	10	10	—	10	10	
4	Belián	30	30	30	19	60	11	1. Dilbori, 20 rifles, 1 havildár.
5	Jaskot	10	10	30	10	40	—	2. Barchar, above Belián } Numbers vary; 80 men nominal.
6	Dilbori	—	22	—	—	—	22	3. Sambalbot, above Dewal }
7	Ghaniyán	14	14	59	.13	73	1	
8	Bhágriáu	15	15	23	12	38	3	(The men at Barchar come down the hill to Jaskot or Guldheri at night.)
	Village Total	69	119	162	54	231	65	25 Sowárs at Oghi.
	Khán's servants	101	21	—	—	101	21	
	Total	170	140	162	54	332	86	

F. D. CUNNINGHAM,
Deputy Commissioner.

APPROXIMATE STATEMENT showing NUMBER of HASANZAÍS, AKAZAÍS, AND OTHERS OF THE BLACK MOUNTAIN CLANS, TENANTS OF THE KHÁN OF AGROR IN THE HAMLETS ON THE BORDER.

Village.	Houses.	Men.
1. Shahto	2	2 Hasanzaís.
2. Chakbat	8	8 Bangash.
3. Chejri	60	3 Hasanzaís. 57 Bangash.
4. Guldheri	8	10 Akazai.
5. Bholu	7	7 Akazai.
6. Dewal	20	2 Hasanzai. 5 Sayads. 15 Miscellaneous.
7. Kewal	20	8 Hasanzai. 13 Akazai. 4 Bangash—3 others.
8. Manewal	8	3 Hasanzai. 2 Sayads. 6 Bangash.
9. Dab	5	5 Hasanzai.
10. Nawagarhi	15	13 Hasanzai.
11. Kulakka	20	5 Hasanzai. 15 Swatís.

F. D. CUNNINGHAM,
Deputy Commissioner.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 6th April 1888.

FORWARDS in original (registered) a petition, dated 1st April 1888, with its envelope, purporting to be from a Hassanzai Jirga to the address of the Commissioner.

How this letter has been received in the Commissioner's office has been noted below the translation, a copy of which is also enclosed for facility of disposal.

2. A translation of the letter, dated 4th April, addressed by the Commissioner to the Nawáb of Amb, with regard to the document, is also enclosed for the information of the Deputy Commissioner.

It is advisable to know the views of the Nawáb of Amb in this case. He has a long experience and great interest and responsibility as regards the Hassanzai.

TRANSLATION of a LETTER, dated 1st April 1888 (received by post), from HAMÍD KHÁN, MAUZA KHÁN, JABBAR KHÁN, DIDAR KHÁN, ALLADAD KHÁN, KHADI KHÁN, MÍR HAMZA KHÁN, SAID KHÁN, GUJAR KHÁN, IDI KHÁN, HAMZA KHÁN, HABIB-ULLAH KHÁN, SHER ZAMAN KHÁN, SHER DAD KHÁN, FAKIR KHÁN and FARRUKH SHER KHÁN, Hassanzai, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division.

MAY it be known from all the Hassanzai that when we waited upon you in Haripur you directed us to forbid Háshim Ali Khán to interfere with British territory. In reply we stated that Háshim Ali Khán was not only our Khán, but that he was the Khán of three tappas, and that we were too weak to exercise any pressure upon him. We said that if we attempted to put any pressure upon him, the Mada Khel and Akazai might help him. We promised that we would quietly endeavour to control him. We have succeeded in preventing him from such interference during the past two years, and in the meantime Turrabáz was arrested. Soon after his apprehension we submitted a letter to the Deputy Commissioner stating that Turrabáz is one of the inferior servants of the Khan, and asking him to release him. We said that if he desired we would tender our apologies also.

The Deputy Commissioner did not take into consideration what loss and damage would be caused to the Government in this matter, and our Khán made a raid by night, in which he killed two persons and took two persons prisoners to independent territory. After the above raid we sent another letter to the Deputy Commissioner to the above effect, but he has taken no notice of it and is making preparations for aggression. He does not understand what is happening. Although we have not as yet helped the Khán, yet, if British troops advance upon our country, we shall be forced to join and assist the Khán. If any fine is imposed upon us, by our Afghán honour we will not pay it. If we join our Khán the Hindústání fanatics will join us, and they beg us night and day for this purpose. At the same time all our partisans as far as Chakaisur and Kohistán will collect and join us, and this expedition will be like the expedition of Machai and Umbeyla. Just deliberate and consider carefully what loss and damage will occur to the British Government. In accordance with our promise we send this letter for your information, so that you may not say that you have not been informed. We urgently desire a reply, and await it.

NOTE.—The envelope of this letter has come by post; it bears the Haripur post mark of the 3rd April, Pesháwar 4th.

TRANSLATION of a LETTER, dated 4th April 1888, from COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the NAWAB of AMB.

I SEND you a copy of a letter, dated 1st April 1888, purporting to be from a Hassanzai Jirga to my address. The original letter has been forwarded to the Deputy Commissioner, Hazára. I received it by post to-day; the cover bore the impression of the seal of the Harípur Post Office, dated 3rd April, and of the Pesháwar Post Office, dated 4th April. I shall be obliged by an expression of your opinion regarding the genuineness of the letter and other points. I wish to know who the writers, whose seals are said to be attached, are, and what proportion of the Hassanzai tribe they represent. I should like rough details of the sections, their leading Maliks and their strength; also what proportion remains unrepresented, the sections, their leading Maliks and their strength; also what do you think is the attitude of the majority of the tribe towards the British Government. Do you know at all on what ground Háshim Ali Khán or the tribe or any one deny the right of the British Government to arrest in British territory Turrabáz, who was charged with raiding and murders on the British village of Kulakka in 1883? And is Háshim Ali or the tribe prepared to say that he (Háshim Ali) was justified in killing some British subjects and kidnapping others because the British officials had arrested Turrabáz?

You are so intimately connected with the whole Hassanzai and know them so well, and have so great a responsibility in regard to their conduct and dealings with the British Government, that I desire to know from you what the Hassanzai argument really is, and what you yourself think of it; and I should also like to have your personal opinion of this difficulty with the Hassanzai and to understand how you think it should be treated. An early reply is requested.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the OFFICIATING SECRETARY to GOVERNMENT, Punjab, dated 10th April 1888.

YOUR No. 30 of the 26th January, forwarding the note of His Honour the Lieutenant-Governor dated 23rd January, and your No. 45 C. of the 15th March, call for the opinions of the Deputy Commissioner of Hazára and of myself upon the question of a military expedition to the Black Mountain or the blockade of any of the tribes.

I now forward in original a report, of the 28th March (received on the 4th instant), from the Deputy Commissioner of Hazára dealing with the above matters. Your No. 146 of the 21st March was subsequently received.

2. The Deputy Commissioner enumerates the offences charged against the Parári Sayads, Tikriwáls, Akazai, and the Khán Khel section of the Hassanzai.

The two first-mentioned communities can be easily dealt with afterwards. The Akazai have been under blockade since 1884; we hear little of them. Since 1885, when they were last settled with, they have been, compared with previous years, inoffensive. They are supposed to be prevented by one family from coming to a final understanding with the Government, and the fact is that the matter interests them very little. So far as the Akazai are concerned, affairs might conveniently remain as they are, and the Shahtút question be avoided.

The offences perpetrated by the Khán Khel section of the Hassanzai are really the work of one man, Háshim Ali Khán, and of his personal followers. They were committed to avenge the murder of his brother, Ahmad Ali Khán, and the arrest of his servant Turrabáz. But Háshim Ali Khán must be punished, and if he cannot be reached direct without their opposition to our proceedings, then his section or tribe must suffer with him, together with all others who enter the lists against us.

The Black Mountain tribes ought before this to have been taught that they shall respect British territory and the lives and properties of British subjects. They do not feel this. They believe that they can when it pleases them challenge the Government, and that they are secure in their position and in the support of all other independent neighbouring tribes. They must be brought to reason. Government certainly could not have a more just cause than the present one, or a better opportunity for dealing with the offenders alone in the first instance, leaving it to the tribes to commit themselves or not against us as they may choose, taking the consequences.

3. The question is, I suppose, still open to discussion whether the punishment shall be immediate by a military expedition, which may have a very disturbing effect across the border, and will bring the Black Mountain tribes the sympathy, if not the active assistance, of all independent communities along our border and beyond; or whether a blockade shall be tried, which isolates the tribes blockaded from all such sympathy, and rather benefits than not those tribes not blockaded. I think that in the end a blockade would succeed in bringing the tribe to reason, but the process is slow. It gives the tribe time to consider its position and to discuss the matter amongst themselves and foresee the consequences, and it is far better that a difficulty should be settled by the voluntary submission of the offenders than that such submission should be merely exacted from them by force in order to save their homesteads and their lives and property. The latter process leaves resentment and bitterness; the first leaves nothing but a sense of shame at having been quietly worsted in a contest with a power that does not desire to injure them.

In the present instance there are good reasons why a military expedition is desirable. The tribes should not think that our hand cannot reach them after they deliberately murdered and kidnapped in our villages or have refused to pay fines inflicted. The houses of Háshim Ali Khán and his followers in Seri should be destroyed by our troops, and our operations should be confined to that object alone.

4. The Deputy Commissioner has, I believe, fairly estimated the strength of the possible opposition which might be offered by the Black Mountain and the Agror border tribes. The crossing of the river Indus, although there are a dozen ferries north of Darband, must present a great obstacle to the tribes on the left bank receiving reinforcements from the west of the river. It is of course very unfortunate that tribes who have no wish to enter into hostilities with Government should be compelled to do so by their sense of Pathán honour.

5. I do not like to pass over without comment some of the remarks of the Deputy Commissioner.

The irritation caused by a blockade would be as nothing compared with that caused by a military expedition, however successful. It is wrong to suppose that the debarring from British territory of tribes or persons has had no result. We only know that when this measure has not brought about submission, there are other reasons, but it certainly has brought about peace and security to our subjects, as compared with the condition of things when these tribes or persons were free to come and go in British territory. The lives and properties of British subjects have been better protected by blockade

than by military expeditions. We must not forget that on the return of 15,000 men from the Black Mountain Expedition of 1868 the Agror border was again immediately attacked by the Akazai, the very tribe whom we had gone to punish, and that a further military expedition had to be asked for and refused. If security for the future is not obtained by a military expedition, the object is not fully arrived at.

6. In paragraph 6 the Deputy Commissioner recommends a plan of a short expedition. The military advisers of the Government will of course consider the proposal to divide the force of 4,000 or 5,000 men into three columns and the question of reserve. In 1868 the western slopes of the Black Mountain were thought too difficult for military operations, and the nearest villages were not even visited by our troops.

The Deputy Commissioner is, I think, too confident that tribes will submit when summoned to do so. It may be the case, and they may be glad of the excuse to throw over Háshim Ali Khán, but I feel that we must be prepared for different tactics on their part. The tribes may offer no opposition, but refuse submission, perhaps endeavouring to protect their villages from favourable positions, and following up our troops on retirement. If submission is not secured, we might have our villages on the Black Mountain burned in retaliation before our eyes. This would necessitate more extended operations, or a longer occupation of the country than the Deputy Commissioner contemplates.

I scarcely think that Chiggarzai or Mada Khel would be affected, as the Deputy Commissioner suggests, by the messages which he proposes to send them, and the troops at Darband would, unless numerous, scarcely lock up the Hassanzai, and would in no way overawe the Hindústáni fanatic colony which now seems inclined to support the offenders.

I think the force of 4,000 or 5,000 is sufficient for our purpose, but it must be prepared for either as long an occupation as that of the Jowáki country, or to sweep through the villages from one end to the other down to the banks of the Indus.

April or May are the best months for an expedition, especially if a lengthy occupation has to be anticipated. It is easier to prevent the cultivation of the autumn crops than to destroy them when arriving at maturity. The destruction of crops is an extremely difficult process.

7. In paragraph 7 of the Deputy Commissioner's letter he makes some remarks on the condition of the Agror Valley, which I believe to be misleading. Since 1875 it has enjoyed very unwonted peace, such as never prevailed before that, or during the life of the late Khán. The Agror villages have learnt to protect themselves from their independent neighbours as they never did before, and they have lived in ease and security compared with the previous condition of things when the Pathán tribes overran the Swáti villages and levied blackmail from one and all, from the Khán and the people. The experience of those days is forgotten, and I think the present does not justify what is no doubt the honest opinion of the Deputy Commissioner. As regards crime in Agror, there certainly is little enough recorded, and it has been often suspected that it is concealed; but the Police, who are strong in the valley, have never been able to detect this during the last 20 years, and neither proprietary body nor tenantry have hinted at such being the case. It is no doubt likely enough that petty offences are settled at home, and quietly and, I suppose, satisfactorily. The nearest Magistrate is at Mansehra, two marches off, and this is why I recommended that the present Khán should be made an Honorary Magistrate and be compelled to record and settle cases according to law. I do not notice what has been said about the Khán of Agror, who is at the present time removed from the valley.

8. Our immediate plan of action ought, I think, to be as follows:—

The Hassanzai should receive an ultimatum directing them again to bring in the kidnapped persons and appear before the Deputy Commissioner of Hazára to settle the claims of Government against Háshim Ali Khán. A detachment of some 300 men should simultaneously be placed in Darband with two guns. This will help the Hassanzai to decide. Two guns should also be sent to Agror. If the tribe refuse they should be immediately block-

aded. The Nawáb of Amb must be intimately associated with Government in this blockade. Sappers and Miners should proceed at once both from Shergarh and from Darband too pen the long-projected road up the Oonar River between Darband and Agror. This has been carefully surveyed, and has long ago been approved, and will be a most useful work. This will show the tribes that we are in earnest.

9. If a military expedition is decided upon, information should be sent to the Chiggarzai that Government intends to exact reparation from Háshim Ali Khán and all who join him, but that it will not injure them in any way unless they give Government cause to do so. They had better send in hostages showing their intention to stand aloof. The troops in Agror and Darband should then be increased as may be convenient. It is only when the attitude of the tribes is known for certain that we shall be able to say whether we will advance direct on Seri, the home of Háshim Ali Khán, or by Darband up the ridge of the Black Mountain from the south, or up the Chittabut spur from the northern end of the Agror Valley.

I think the troops should have the summer before them and that preparations should be at once begun.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 28th March 1888.

IN compliance with paragraph 4 of a letter, dated 15th instant, received with your endorsement, dated 20th, I have the honour to submit the following opinion as to the measures which appear necessary to effect a satisfactory settlement of demands outstanding against independent clans on the Agror border. I am not sure whether my report of 5th March, in which I discussed the practicability of a blockade against the Hassanzai was before the Government when Mr. Tupper's letter of 15th instant was written. If in this letier I go over part of the same ground again I trust to be excused for the sake of the convenience of presenting the whole matter in one complete report.

In treating of a question like this there are so many contingencies to be discussed that for sake of clearness I propose to deal with it under three heads :—

I. The objects before us.
II. The possible or probable opposition to our demands.
III. The various means of enforcing these demands.

Objects in demand.

2. In order to understand the objects which are before Government, it will be convenient to survey our present position as regards clans on the Agror border. Taking them north to south, the cases against them are as follows :—

(*i.*) *Sayads and Chigarzais of Parári.*—For their earlier offences culminating in association with large raids in 1884 a fine of Rs. 2,000 was proposed by you, but eventually they were let off on payment of Rs. 600, part of which they possibly recovered in the inevitable "hospitality" shown to a jirga. Since then they have committed the following offences :—

(*a.*) Participation in a raid on Bhágrián (11th July 1887); two British subjects killed in the defence.

(*b.*) Murder of Núr Jamál (11th August 1887); an act reported at the time to be entirely unprovoked, and not in pursuance of any feud or claim against the victim.

(*c.*) Arrest and detention of two British subjects (March 1888). They were released after some days, but whether as alleged ransom was paid or only security given for payment is not certain.

For (*a*) and (*b*) the Honourable the Lieutenant-Governor has directed a fine of Rs. 836 to be demanded, and if they compel us to use active measures the amount should of course be enhanced.

(*ii.*) *Tikriwáls.*—The share taken by the servants and dependants of Rahím Khán of Chirmang in the raid on Bhágrián should be noticed here.

His Honour the Lieutenant-Governor sanctioned a fine of Rs. 360 on him, or of Rs. 500 if he compels resort to force before submission. My informa-

tion goes to show that he is not likely to give in unless frightened at least by a show of force.

(*iii.*) *Akazai.*—This tribe are still under blockade, which has been ineffectual to secure their submission or payment of a fine of Rs. 2,000 imposed on them for many serious offences and daring raids in concert with the Chigarzai in 1884. The faction led by the sons of Zaríf Khán, Painda Khel, have since committed many petty offences in British territory. They stood out against the settlement of Shahtút question at the instance, it was believed and reported, of the agent of the Khán of Agror. As they are partisans of the Khán and many Akázai are settled in Agror as his tenants, the so-called blockade has probably been a farce from the beginning.

(*iv.*) *Khán Khel Hassanzai.*—

(*a.*) In 1883 a band of 120 men sent by Háshim Ali Khán, Chief of Seri, attacked Kulakka, a village in the plain of Agror, and killed four men (enemies of the Khán of Agror). For this Háshim Ali was fined Rs. 2,000 which has not yet been recovered.

(*b.*) Háshim Ali Khán's servants killed several men in smaller raids in 1880 and following years. *See* my No. 244 C. of 4th February 1888, paragraph 6, and Colonel Hastings' No. 123 of 16th April 1883.

(*c.*) On 9th January 1888 a band of servants and followers of Háshim Ali Khán from Seri, led by his cousin, attacked a hamlet near Ghanián, killed two men, carried off two others, whom they still hold captives. This was in revenge for the arrest of Turrabáz, a servant of Háshim Ali Khán, a proclaimed offender, who has since been tried and convicted of murder. The surrender of the captives has been demanded and refused, and though no other terms have yet been announced by Government, it is clear that the mere restoration of his prisoners will not suffice to meet these offences.

Importance of exacting full punishment and submission of the Khán Khel.

3. I have grouped these together, partly because they include all outstanding scores on the Agror border, or indeed on the Hazára frontier, save that with Alábir, whose offences are of older date, and can be more conveniently dealt with separately, and partly because it is difficult to discuss any measures against the Khán Khel Hassanzai without noticing the Akázai, who would probably have to be reckoned with as supporters of the Khán of Seri. It would be possible to detach them from him by arrangements which will be noted below, though they seem to me unadvisable because undignified.

Of the objects before us and of the demands to be enforced, the most important clearly is to recover the two captives from Seri and to punish Háshim Ali Khán. The raid of the 9th January, which has raised the vexed question of this border, was not one of a common type for plunder or in the course of a feud, but a deliberate attack on the liberty of action of Government as regards a Trans-border ruffian long proclaimed for more than one murder, and finally arrested in British territory. The relatives of one of his victims, aiding the Police, caught Turrabáz; he was committed for trial, and Háshim Ali Khán invited to send in his witnesses. The date of the approaching Sessions being notified to him before by his friends in Agror, he elected to defend his servant by a counter-raid, in which he killed two and carried off two British subjects, whom he holds as hostages, and whom we have to recover. This appears to me an imperative duty. If we give way, or show any sign of weakness in dealing with the servant or the master, the people of our own territory as well as those beyond are quite shrewd enough to see that it will amount to a repeal of the Penal Code as regards foreigners offending in British India, or at least to the establishment of a general exception that nothing is an offence committed in Hazára by men from the further side of the Black Mountain whose friends are ready to use musket and sword in their defence.

It is hardly possible to accept such a position, which would amount to abdication of the first function of Government, and to avoid a precedent which might be followed whenever another Turrabáz is arrested. It seems to me imperative to insist on, not only the restoration of the captives, but the punishment of Háshim Ali Khán by fine and by expulsion from the Chiefship

and from Hassanzai limits Cis-Indus, which should be secured by the surrender of hostages.

4. I come now to the question of the nature of opposition to be overcome in enforcing these demands. Háshim Ali Khán is nominal chief of the Isazai family of the Yusafzai, who include Hassanzai, Akazai and Mada Khel, but their allegiance is only nominal, and his influence is paramount only among the Khán Khel section of the Hassanzai who live in Seri, Karon, Kuháni, Rel, and other villages in the upper glens of the western slopes of the Black Mountain, opposite Oghi and Shergarh. With their Gujar and Bangash tenants the Khán Khel may number 250 men all told. The highest estimate of the Hassanzai is 2,000 men, among whom there are not more than 1,300 or 1,400 fire-arms, matchlocks, flintlocks, &c., and certainly not half a dozen rifles. They are a divided tribe; a majority is under the influence of the Nawáb of Amb, whose co-operation can be fully relied on, and with proper measures it should be easy to ensure the neutrality of half of the clan. It is true they have shown no inclination to coerce Háshim Ali Khán for us, but it is not easy to unite them for action on behalf of the foreigner against their nominal head. It would be a simpler matter to prevent them from drawing sword in his defence, provided only they have a specious excuse to parade hereafter. The mainsprings actuating conduct in a Pathán community are vanity, greed, and fear, in this order of importance.

Oppositions to be expected. Hassanzai.

Their vanity demands that they should not give way or give in to Government unless they have an excuse ("uzr"), a word of which the full meaning can only be learnt by experience of life among them. Such a pretext for inaction if Háshim Ali were attacked would be afforded by a show of force. A detachment of troops at Darband, aided by the Nawáb of Amb's followers, would suffice nominally to overawe them, and they could plead inability to leave their homes in order to defend their neighbours. They have no desire to fight, and with proper arrangements made by the Nawáb among those who are his partisans, and with any specious pretext for keeping quiet, half the tribe at least would remain neutral.

In this calculation I am of course proceeding on the assumption that it will be thought better to detach the Hassanzai from Háshim Ali Khán, rather than insist on their being responsible for his acts, to the extent of deserving to share his punishment. If a threat of active measures would induce them to undertake the task of enforcing his submission, there would be good reason to maintain their responsibility; but unless punishment be brought to their very doors, it is doubtful whether they will move against him: and if Government should be compelled to chastise the Khán Khel, it would be worth while to give half the Hassanzai the opportunity to stand aloof and abstain from helping him or opposing us.

If, however, Government elect for a blockade, then of course it must include the whole clan.

The Akazai comprise about 600 men; with their tenants and dependants they may come to 800. They may be expected to side with the Khán Khel in any event. It might be possible to detach them by patching up a peace with them on the understanding that their past offences were forgiven, and that the blockade against them should be removed. This seems to me an undignified step; it is not necessary to stoop to them in order to conquer the others; their misconduct in 1884 was very gross and is still unpunished; they have never ceased from an attitude of hostility, and have been persistent offenders. Moreover, their power to resist action on our side is so small, while their capacity for giving trouble on this border is so considerable that it appears to me the slight extra exertion needed to teach them also a lesson of respect for the lives and property of British subjects would be amply repaid in the increase of security on the Agror frontier in future. They are at present occupied in considering the partition of their lands; the Painda Khel section headed by our persistent enemies, the sons of Zaríf Khán of Shahtút notoriety, partisans of the Khán of Agror,* have demanded a redistribution ("wesh") before the end

Akázai.

* *See* correspondence about Shahtút and Agror affairs *passim*.

of the customary period. In the last partition Led fell to their share, and they wish to get back to Khán, nearer to our border, not because the land is richer or better, but because its position gives them importance and the chance of making profitable disturbances.

Parárís.

The two Parári glens belong to Sayids and Akhún Khel who were settled here by Deshís and Swatís of Tikri as a buffer against the incursions of their hungry and powerful neighbours, the Chigarzai. The Sayads number about 100 fighting men, and there are 300 or 400 others mostly Chigarzaís (Bassi Khel), who have taken land in mortgage or settled in Parári as cultivators. They would not join the Khán Khel, nor oppose us in any way unless themselves threatened; but they are an insignificant body, easily punished; there is a heavy score against them; and they have learned nothing from the lenient treatment they have received.

Information from many quarters shows that the Parárís have held a jirga and have resolved not to submit, nor send in any deputation to arrange for peace. They would, I believe, agree to pay—

(*a*) the loss in cattle occasioned to Sakhi Sháh in the raid on Bhágrián—July 1887; and

(*b*) any ransom taken from Gul Hassan, Akhunzada, kidnapped in the beginning of this month.

But they have resolved to pay no other fine either for their offences or for the deaths of the two men killed in repelling the raid in July last. Nothing but the sight of punishment imminent will compel their submission. They have buried most of their grain stores and sent part of their cattle away in fear of an expedition, and keep a picket or chanki on the Jal Pass on the border of British territory.

Chigarzai.

To complete this review it is necessary to notice the Chigarzai and Mada Khel. The former are the largest of the Black Mountain clans, and number perhaps between 5,000 and 6,000, half of whom live beyond the river. In 1884 they attacked a village on the border in prosecution of the cause of Abdulla Khán, the outlaw, but subsequently sent in a jirga, paid a fine of Rs. 800, and have since not given trouble, though they have more than once threatened mischief. It is not easy to foresee their conduct certainly. They would probably not move a man to defend Háshim Ali Khán, as they have no particular friendship with the Hassanzai; but if troops visited Puarári some contingents from the Chigarzai might cross the range to support their clansmen settled their. I have only today received letters from their principal Maliks reiterating the old complaint * that they came in and paid up a fine in 1885 on the understanding that Government would restore the lands claimed by their client Abdulla Khán to his son, and that they have been cheated and deceived.

* *See* correspondence in Punjab Government Proceedings, Foreign Department, Nos. 12–36, December 1887.
Deputy Commissioner, Hazára's No. 572 of 1st November 1886.
No. 61 of 28th January 1887, and No. 204 of 10th March 1887.

Some concession in the matter of Abdulla Khán would, I have no doubt, keep the Chigarzai quiet. On the other hand, though they are numerous they are not well armed, nor formidable, nor is it likely under any circumstances that more than 2,000 of them would oppose such measures as are here suggested. If Government should decide on taking active steps it may be worth while to consider whether any concession could be made on behalf of Abdulla Khán's son or family such as would secure the inaction of the Chigarzai, but I do not recommend giving way from the position formally taken up by Government in the matter, and the more proper course seems to be to ignore their interference and defeat them if they oppose us.

Mada Khel.

The Mada Khel are settled wholly beyond the Indus, and to such measures as are suggested below no opposition from them need be anticipated.

Hindustánís.

The Hindustáni colony of Mujáhidín at Palosai should also be mentioned; they number 500 and would probably send a contingent to assist the Khán Khel; if the whole Hassanzai were involved they would certainly have to join them, for they live as dependants under their protection.

Supposing then that it were decided to compel the restoration of the captives, the submission of Háshim Ali Khán, and the punishment of the Akazaís and Paráris by force, the probable and possible opposition to be expected in carrying out the entire programme appears to me, allowing for every contingency, to be as follows:—

Tribe.	Active opposition.	
	Probable.	Possible.
Hassanzai - - - - - -	1,000	2,000
Akazai - - - - - -	800	800
Paráris - - - - - -	500	500
Hindustánis - - - - - -	100	500
Chigarzai - - - - - -	2,000	3,000
Mada Khel - - - - - -	—	500

All these tribes are poorly armed; there are not ten rifles on the whole Black Mountain, and probably only two-thirds or three-fourths of the fighting strength have fire-arms of any kind. If measures are directed against the Khán Khel only, and Parári is not touched, then the Chigarzai can be left out of the calculation; at the utmost we should have to deal with—

The Khán Khel - - -	say	250
Part of the Hassanzai - - -	,,	1,000
The Akazai - - - -	,,	800
Hindustánis - - - -	,,	500
Total - - - -		2,500

Whether the whole programme as sketched out below were attempted or only a portion of it, the operations would not last long enough to attract large contingents from the most distant Chigarzai and Mada Khel beyond the river. The former might possibly join even if operations were against the Hassanzai and Akazai only, and must certainly be reckoned with if we enter Parári, but none of the clans are formidable as fighters; the only body who may be expected to show any determination are the Hindustánis, who have to justify their existence in the eyes of their protectors; but it is probable that the Hassanzai, if overawed by the step suggested below, would insist on their staying quiet. It is not easy to foresee accurately the possible attitude of these clans, but it may be taken as an axiom that opposition will vary directly with the extent of our demands, and inversely as the pressure applied to enforce them.

Measures by which these demands may be enforced discussed.

(1.) A blockade.

5. I come now to the third head—the measures by which demands already announced or which Government will probably think necessary to insist upon may be enforced and secured. To take first the plan of a blockade as recommended in your letter No. 58 C. of 24th February, to Secretary to Government. I have ere this in my No. 438 of 5th March, and other papers, quoted all available authorities showing that a blockade would be ineffectual against the Hassanzai. See Mason's edition of Paget's "Expeditions," page 30—"a blockade would do them no harm,"—and the notes compiled in this district office in 1881—"the Hassanzai are not dependent on us at all."

While I will not go so far as to say that a blockade would not inconvenience them to some extent, I have no hesitation in saying that it would work very slowly; that it would never bring them to the point of compelling their chief to give way to Government; and that meanwhile it would prolong a term of irritation during which they might retaliate by raids, and eventually force us in self-defence to action which might perhaps with greater economy be taken now. They are a divided tribe, and, except under a much stronger solvent of present antagonisms than a blockade would give, they will not unite to punish Háshim Ali Khán while we sit still.

It is of course within the bounds of possibility that a blockade might bring them to this point, but it is in the highest degree improbable, and I do not

believe that any pressure which the Nawáb of Amb, a foreigner to them and a Tánaoli, could exert would impel them to take up arms actively against the Khán of Seri.

The history of previous blockades on this border is not encouraging; there has been a nominal blockade against the Akazai for four years without result. Háshim Ali Khán and his followers have been debarred from British territory for five years, but not a penny of the fine imposed for raids and murders still unpunished has yet been realized. A fine of Rs. 500 has been outstanding against the Aláhíwáls for twenty years (since 1868), and is still due or at least still unpaid; they were blockaded in 1878, for the raid on Battal, and of the fine, ultimately reduced to Rs. 5,000, nothing has been recovered. I believe that nothing but the use of force, or certainly the show of force, will procure submission to demands which have been announced, and which must be pressed home if the supremacy of Government is to be more than nominal on this border, or if the lives and property of our subjects are to be efficiently protected in future.

A short expedition. Plan recommended.

6. This of course means the employment of troops. A show of force would probably suffice to bring in the Paráris, leaving us only the Akazai and Hassanzai to deal with. But even if that were not so, a force of 4,000 men with a sufficient complement of mule-guns would be more than ample to accomplish without possibility of mischance all the objects set out, and to meet and defeat all conceivable coalitions and all possible opposition.

Such a force should advance in three columns—

A. Right, from Oghi by the Jál Pass to Mana-ka-Danna; leave a detachment there, and ascend the Chitabat peak of the Black Mountain, where is water and camping-ground;

B. Centre, from Oghi by the Barchar spur; and

C. Left, by the Sambalbut spur to the crest of the range.

The centre and left columns could reach the top of the mountain in a day easily, starting one day later than the right column, which could halt for the night on Mana-ka-Danna, pushing on to Chitabat next day; thence it could follow the route taken in 1868, on to the Machai, while the other two columns reached the crest at other points to the south. Provisions for a few days should be sent with the troops, who could camp on the Machai and Chitabat peaks, at Barchar-ka-Chapra, or any suitable place south of Chitabat. They would then entirely dominate all the clans who have to be dealt with, and the positions chosen would prevent the tribes uniting their strength; each would have to stay to guard its own territory, lest it should be attacked in their absence. To the east stretch the Parári glens running down to Tikri, to the west the Akazai tract falls to the Indus, and south of them again are the Khán Khel.

Acting with deliberation and method I would begin with the Paráris, order them to come in and submit to terms, viz., a fine and the surrender of hostages, keeping their principal Maliks with the camp as security for their good behaviour. Failing compliance, the troops should visit their villages, destroy all burjes and forts, carry away all stores of grain, cut the crops for baggage animals, and ascend the hill again to the camps on the crest.

Next day I would send a similar message to the Akazai, and have little doubt that, having seen the Paráris either submit or be chastised, they would themselves surrender at discretion.

On the fourth day (allowing a halt if necessary) I would deal in the same way with the Khán Khel, the force moving along the ridge southwards, so as to command completely the Kahi Gali, Panjai routes, and suitable points on the crest of the range. Failing submission, I would destroy all Khán Khel villages, and all belonging to any sections of the Hassanzai who might oppose us. After which the force might return by the Pabbal or Panjai Galis to Tanawál or Agror. To restrict hostile operations as far as possible, I would before advancing send word to the Chigarzai that no harm was intended to any of them, save those who as tenants of the Saiyads in Parári have joined in offences in British territory, and that the troops would not advance beyond Parári or Akazai limits, unless the Chigarzai of Pakhan and the further valleys opposed us.

Similar messages should of course be sent to the Hassanzai and to the Mada Khel beyond the river.

A strong detachment of troops should be put at Darband to aid the Nawáb's influence in keeping the bulk of the Hassanzai quiet, and this step would probably lock up the Hindustánís of Palosai, as above explained. It is quite possible that a force such as I suggest above would do all without firing a shot; in any case it could meet and defeat all opposition. These tribes have the poorest description of fire-arms; there are not 20 rifles among all the Black Mountain clans on the side of the Indus. The routes and the country to be traversed are known, and though the other side of the range is steep and the roads bad, it has none of the difficulties which accompany the unknown.

The plan above sketched out appears to me a secure and dignified way of settling all our demands methodically and with deliberation, without soliciting aid or seeking a neutrality which is always malevolent.

The whole programme need not occupy more than ten days, thus—

Occupation of the Machai, Chitabat, Barchar-ka-Chapra and Káhi Gali, *i.e.*, of suitable positions on the crest of the range	2 days.
Action against the Paráris - - - - -	2 „
Action against the Akazai - - - - -	2 „
Action against the Khán Khel - - - -	2 „
Return to British territory - - - - -	2 „

In fact it is probable that to troops in the positions named the Paráris would rather submit than resist, and the Akazai might do the same. The complete punishment of the Khán Khel might occupy one day more, but it appears to me the whole programme could be carried out in 10 days.

The end of April (20th–30th) or beginning of October (1st–10th) would be the best season in my opinion for an expedition, as the weather would be favourable and crops standing.

Advantages of teaching these clans to respect British territory.

7. It may be that Government will decide the game is not worth the candle, and though I have attempted in earlier reports, I may not have succeeded in depicting to higher authorities the state of Agror as I see it. If I could describe it as it is, I believe the attainment of security and protection in this valley, which in common local parlance (to my mind not wholly unjustified) has for years past been styled "Yághistán," and the enforcing on our neighbours that respect for British territory and British law which alone can safeguard the lives and property of our subjects on this frontier; these objects would, I believe, be thought well worth the small effort involved in moving 4,000 men and keeping them in the field for a week or 10 days. Not the least important result would be that, in proportion to the fear enforced on our enemies, the confidence of our own subjects would increase. At present they are cowed—whatever happens they suffer—the Khán Khel murder them in the Agror plain, storming their burjes by night and are fined; they repeat the offence and another fine is imposed, but none are realized. If we are to expect the Swáthís of this valley to use the arms we have given them with confidence and courage, we must show them that Government will not permit its subjects to be murdered and kidnapped with impunity.

At present they know that the vengeance of the Khán Khel and Akazai is swift and sure, while as against their persecutors the hands of Government seem far off and uncertain.

As a matter of fact, I think the troops required might safely be reduced to 3,000, for the sight of a force on the Machai, Chitabat and Mana-ka-Danna would in all probability bring the Paráris to submit, and with that the chance of the opposition being swelled by a contingent from the Chigarzai would disappear. We should then, as I have said above, have only the Hassanzai (part of the clan), Akazai, and possibly the Hindustánís to deal with. Of the last perhaps the more that come the better.

Blockade how to be enforced if resolved on.

8. If, however, Government decides entirely against the use of force, then I see no resource but a blockade of the whole Hassanzai, though in that event I would recommend that we studiously avoid naming any terms which would

be seriously unpalatable to these clans. Within this generation a blockade will not enforce such conditions, and we shall have again to be content with an inch after announcing that we must have an ell and nothing less. The Nawáb of Amb should be ordered to shut out the Hassanzai from Darband and Tanawál, and for the rest we must trust to the Police in Oghi and Kirplián. Even then it must be remembered that not only can the Hassanzai and Akazai easily supply themselves from neighbouring independent territory, but their fellow-clansmen occupy as tenants of the Khán nearly all the border hamlets which fringe the Agror Valley on the slopes of the Black Mountain, and unless the policy and inclination of the Khán should be diametrically opposite to what they have been in the past, I have little belief in a blockade from this side being of much good. To be rigorously excluded from Darband will cause them some small inconvenience, but not enough to compel submission to terms such as Government either has already demanded or will yet have to announce. I have in another letter reported fully on the measures taken for defence of the border. It may be necessary, if a blockade only is determined on, to retain more than the usual garrison at Oghi for some time; this depends entirely on the result of the visit of the Khán of Agror to Lahore.

Changes in Agror as important as or more so than active measures beyond it.

9. If he returns with the conviction that he must alter his course, and that he cannot again conceal intrigues against his fellow-subjects here, he may come back in such a frame of mind as may justify confidence in his 100 rifles and 25 sowárs being used for the defence of the valley, or, what is more important, such as may warrant a hope that he will not connive at or instigate fresh "demonstrations" in which his retainers no doubt fire off much powder and occasionally are shot, but which are got up for their master's own ends and had better be avoided altogether.

I hardly believe in his being convinced of the necessity or the wisdom of working honestly, because no misconduct and no intrigues in the future are likely to be capable of more proof than those which I have reported; and if he is to be trusted again, he, too, will confide in his own power of evasion and escape. In other reports I have detailed at length the reasons for my opinion of his conduct, and have yet many proofs to give. In this letter, on the general subject of our relations on this border, I need only say that I am fully persuaded that for the peace of this frontier and for the quiet of this valley, what is even more necessary than any active measures against the independent clans is the permanent removal of 'Ali Gohar Khán and the speedy substitution of another brother as Khán and Chief in Agror. A long interregnum is not desirable, as the bulk of the people are his dependants, tenants-at-will, and servants, and dare not lift a finger, save with his approval. So many of his enemies here have suffered at the hands of his friends among the Khán Khel and Akazai that it is not to be wondered if the Agrorwáls are chary to do service against his supposed wishes. If Government should come to the conclusion that there is moral certitude of his guilt, even though the proof be not of a nature which would as evidence in a Court of law secure conviction for an offence under the Penal Code, then the sooner he is removed by Executive order from the place to which he was appointed in preference to an elder brother, the better for this border.

In this course there is no danger of such disturbances as followed Ata Muhammad Khán's removal. When he left no one else filled his place; if, simultaneously with the deposition of the Khán, his brother were nominated, the successor would at once command the service of all Agror, save of a handful of personal servants of Ali Gohar Khán. They must follow the Khán or he could evict and ruin them; they must work in his interests, which in this case must be those of peace, and perforce must be opposed to our present enemies and to those who have given most trouble on this border for years past.

The evil in Agror cannot be cured by half measures or mild treatment. A perpetual injunction against Fazl Ali and his brothers living here, the permanent removal of the present Khán on an allowance or guzára such as his brothers now get, and the appointment of his brother are steps which, I believe, are as necessary to bring this valley into the normal condition of

a part of the British territory as any active measures against the tribes beyond, who in many instances have been the tools of schemes and intrigues hatched in Shámdarra and ordered from Oghi. For years past the valley has been practically ruled by Fazl Ali, the Police are a nonentity, murders occur here as elsewhere, women are abducted, but no one dares to complain in the Thána against the Khán's servants or those connected with him.

On paper Agror appears free from crime, but that is hardly because the Swáthís are living in Arcady.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 10th April 1888.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letters and telegrams on the subject of Agror affairs.

2. It appears from these papers that orders are required on the following matters, viz.:—

(1.) The defence of the Agror Valley.
(2.) The proposed blockade of the Hassanzaís and others.
(3.) The degree, if any, by which the garrison of Agror must be strengthened.
(4.) The management of the Agror Valley and the property of the Khán.
(5.) The orders passed by yourself with reference to the kidnapping in independent territory of Gul Hasan and Fazl-ud-dín of Baffa.

3. The question of the defence of Agror is dealt with in your letters, dated respectively 22nd and 31st March, and in the communications of the Deputy Commissioner therewith received, bearing dates 16th March and 26th March. I am to say that the Lieutenant-Governor agrees with you in considering that the arrangements already made by the Deputy Commissioner for distributing arms amongst the people of the valley are very judicious. Mr. Lyall further quite approves of the action taken by Mr. Cunningham in the way of selecting the villages for the loan of arms and in the choice or strengthening of posts on the border. The Deputy Commissioner is, as recommended by you, allowed full discretion to disarm all or any of the Khán's retainers as he may find necessary.

4. In paragraph 5 of my letter of the 21st March it was said that the question of blockading the Hassanzaís must stand over till it is quite clear that they take sides with Háshim Ali against the Government and have no intention of exerting themselves to get the kidnapped men released. The final reply of the Hassanzai Jirga received with your letter, dated 15th March, shows beyond doubt, as pointed out by Mr. Cunningham, that they have no intention of fulfilling the wishes of Government or compelling Háshim Ali Khán to surrender his captives. Accordingly, I am now to say that the Hassanzaís and the Parári Syads and other dependent clans and adherents concerned must be strickly blockaded on our side and through the Nawáb of Amb. This measure, I am to add, has the sanction of the Government of India. The manner in which the blockade is applied and the extent of country covered by the line of blockade should be reported after action has been taken.

5. It is stated in paragraph 2 of Mr. Cunningham's letter, dated 16th March, that the garrison at Oghi has been increased to 300 men, and in paragraph 3 of your letter, dated 16th March, you suggest, with reference to the kidnapping of Gul Hasan and Fazl-ud-dín, since released, that if an entire regiment were moved to Agror some two-thirds of it might be used with advantage to act against Parári and Bilandkot, and that the results might have an excellent effect upon the border, proving to the tribe their inability to resist us. This letter crossed my communication No. 146, dated 21st March, in paragraph 7 of which Mr. Lyall expressed a wish that the Brigadier-General commanding the Frontier Force should be consulted as to whether a whole regiment and either a mule battery or half a battery should be sent to the Agror Valley this month. Mr. Lyall was then of opinion that it would probably not be advisable to use troops against the

Parári Syads or Rahím Khán of Chirmang pending the decision of Government as to the action to be taken against the Khán Khel Hassanzaís. I am now to say that advice on the question whether troops should be used for such small expeditions across the border has ceased to be necessary. The degree, if any, by which the garrison of Agror has to be further increased in consequence of the blockade hereby ordered should no doubt be considered; but any increase of the garrison must be limited to the degree required for defence only. No expedition, small or large, is to be undertaken against the Parári Syads or Hassanzaís without the special sanction of Government.

6. As to the management of the Agror Valley referred to in paragraph 5 of my letter No. 96, dated the 25th February last, and in paragraph 4 of my letter No. 146, dated 21st March, and discussed in paragraphs 2 and 3 of your letter No. 101 C., dated 22nd idem, I am to say that during the absence of the Khán the Deputy Commissioner must manage the border. He may be given discretion to appoint a special official as his deputy on the spot if he considers this necessary.

7. As regards the management of the Khán's property, the Khán will be asked here to appoint an agent or agents to act during his absence and to report the name or names he suggests to the Deputy Commissioner for approval.

8. Your orders in the case of Gul Hasan and Fazl-ud-dín are contained in your letter No. 99 C., dated 22nd March, to the address of the Deputy Commissioner. You rightly note that Rs. 127 ransom and a suitable fine have to be recovered; and your further instructions to the Deputy Commissioner are also approved, viz., that endeavours should be made to bring home the guilt of Bostan, son of Fazl Ali Khán, agent of the Khán of Agror, and of the father; and that the Khán of Agror and Fazl Ali must at some time be called upon to explain how they allowed any Parári Syads to be in Oghi on the 7th of November last when these men were liable to arrest in British territory and the Khán's agent had already received verbal and written orders to this effect.

ENCLOSURE No. 20.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated Lahore, 22nd May 1888.

WITH reference to the note recorded by the Lieutenant-Governor on affairs in Agror, dated the 21st of April 1888 submitted to you with my letter, dated the 3rd of May 1888, I am directed to forward, for the information of the Government of India, a copy of correspondence from which it will be seen that the Deputy Commissioner of Pesháwar thinks that there is no probability of assistance being given to the tribes of the Black Mountain by the men of Chamla and Boner, but that possibly a few Amazai, Madda Khel and Hindustáni fanatics might cross the Indus to the aid of Háshim Ali Khán if a military expedition were sent against the Khán Khel Hassanzai on the Hazára border.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 9th April 1888.

IN continuation of this office No. 1712 of the 6th instant, forwards, for information and any remarks which the Deputy Commissioner may wish to make, a translation of information received by the Commissioner regarding Háshim Ali Khán of the Hassanzai tribe and his being supported by certain tribes of independent territory.

2. A copy of the same information has been forwarded to the Deputy Commissioner, Pesháwar, who has been asked to favour the Commissioner with any remarks on the probability of assistance being given to the Black Moun-

tain tribes by Chamla and Boner, or any other tribes on the Pesháwar District border, if a military expedition were sent against the Khán Khel Hassanzai on the Hazára border.

INFORMATION received by the COMMISSIONER from a source which is probably reliable.

DEPUTATIONS from the Hassanzai, Madda Khel, Akazai and Chiggarzai countries and the Hindustáni fanatics visited Háshim Ali Khán of Seri, and passed a joint resolution on oath to the effect that they would all joim him in religious war, and that he should feel no anxiety. If British troops advanced, Háshim Ali Khán was to inform the above tribes and they would at once join him. The people of Boner and Chamla have also held out hopes to Háshim Ali Khán that they would help him as soon as he sent them an invitation. Some Hindustáni fanatics are still in Seri, together with their Sardár. [*N.B.*—Apparently meaning the ringleader, Maulvi Abdulla.—W. G. W.] They have taken some artillery with them.

As I am a well-wisher of the British Government, I send the above for its information and the taking of necessary measures.

From DEPUTY COMMISSIONER, Pesháwar, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 27th April 1888.

IN reply to your letter, dated 9th April 1888, I have the honour to state that there is no probability of assistance being given to the Black Mountain tribes by the men of Chamla and Boner. If they should have any such thoughts the threat of a blockade would at once check any intention to go to the aid of the Hassanzai. Possibly a few Amazai, Madda Khel and some of the Hindustáni fanatics might cross the Indus in the event of an expedition on the Black Mountain, but not in numbers sufficient to make any appreciable difference. I do not think there is any truth in the rumour that Boner and Chamla have promised to help the Hassanzai.

ENCLOSURE No. 21.

From SECRETARY to the GOVERNMENT of INDIA, Foreign Department, to the SECRETARY to the GOVERNMENT of the PUNJAB, dated 25th May 1888.

I AM directed to acknowledge the receipt of your letter, dated the 3rd of May, submitting further correspondence on the subject of the present condition of the Hazára border, together with a note by His Honour the Lieutenant-Governor containing remarks on the orders of Government, and His Honour's proposals for securing the safety of the exposed frontier of the Agror Valley.

2. Mr. Lyall has, in accordance with the instructions of the Government of India, directed the Commissioner of Pesháwar and the Deputy Commissioner of Hazára to enforce a strict blockade on the Hassanzaís; but he considers that even the moderate terms which he proposes to exact will not be obtained by blockade only, and he fears that in dealing with these Black Mountain tribes a blockade of long continuance in an effective form will be found more troublesome and injurious to the British Government and its subjects than to the tribes blockaded. For these reasons Mr. Lyall asks whether, if by the end of August next, the blockade alone appears likely to be unsuccessful, preparations should not be made for military operations to be commenced in October.

3. The Governor-General in Council is unable to see in the correspondence now submitted reason to modify the instructions conveyed in my letter, dated the 28th March. No new fact is brought forward except that the Commissioner of Pesháwar has received, under circumstances not yet explained, a

defiant letter purporting to come from a Hassanzai Jirga, which, if it is a genuine expression of the feeling of the Hassanzaís, shows that the Government of India was right in thinking that a resort to hostilities would probably lead to a tribal combination. The Government of India is most unwilling to have recourse to a military expedition, and would sanction such a measure with extreme reluctance and only in the last resort. Without in any way anticipating what the subsequent course of unforeseen events may possibly force upon us, the Governor-General in Council sees nothing in the present state of affairs to warrant the conclusion that resort to military force is unavoidable. It cannot be expected that any appreciable progress towards the submission of the tribes will have been made by the end of August; and the Governor-General in Council is not prepared to accept the want of success of the blockade up to that time as proof of its inefficacy or of the expediency of armed action. The effect of a blockade is not usually seen till after a long interval of time. It is necessary therefore to wait and watch with patience, and in the meantime to use every effort to make the blockade effective against the offending tribe.

4. The Honourable the Lieutenant-Governor refers to the offences which have given rise to the correspondence as acts which would bring on a war between two Great Powers; but I am to point out that between Great Powers, such acts would not occur, and that they are the inevitable result of the contact of civilization with barbarism. Mr. Lyall further seems to draw a distinction between raids perpetrated for the purpose of plunder, and raids committed out of bravado, as affecting our duties and obligations in the matter. The Governor-General in Council is unable to recognize this distinction, nor can he admit that he would be justified in undertaking a war to punish barbarous tribes because they are boastful and defiant. The duty of the Government is to afford the best protection it can to the lives and property of its subjects; and the adaptation of the means to this end is a question of reasonableness and judicious appreciation with reference to the conditions in which it finds itself situated.

5. The Governor-General in Council fully admits that military expeditions may sometimes be necessary; but His Excellency in Council is assured that the policy followed since 1870 upon the Punjab frontier has produced better results than the former policy of threats and reprisals.

6. With reference to the Khán of Agror, the Honourable the Lieutenant-Governor is not yet ready to ask the Government of India to pass orders on his case; but His Honour observes that the levy of armed retainers which the Khán has hitherto kept up is an untrustworthy body of men, and Mr. Lyall has, with the concurrence of the Commissioner, given the Deputy Commissioner of Hazára discretion to disarm all, or any of them, as he may find necessary. Under the circumstance it is proposed that the jagir granted to the Khán for the purpose of keeping up this levy should be resumed from next autumn, notice of the intention to resume it being at once given to the Khán. In place of the levy, Mr. Lyall recommends that the Deputy Commissioner be authorized to entertain a Border Militia for the defence of the Agror frontier up to a cost of Rs. 4,000 per annum. Any of the Khán's men who are considered trustworthy would be enlisted if they are willing to leave the Khán's service and serve the Government.

7. The Governor-General in Council doubts whether this measure is not somewhat premature; but His Excellency will not withhold his sanction if Mr. Lyall believes it to be necessary for the peace of the border.

8. In conclusion, I am to observe that His Honour the Lieutenant-Governor does not appear to have consulted the General commanding the Frontier Force except with reference to the strength of the garrison of Oghi. At the time when the Punjab Frontier Force was placed under the orders of His Excellency the Commander-in-Chief, the position of the General commanding as one of the advisers of the Punjab Government in questions of this nature was carefully guarded, and I am to suggest that it may be desirable in future to consult him in such cases both with regard to the military aspect of the question, and with regard to the general policy.

ENCLOSURE No. 22.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated 23rd June 1888.

I AM directed to submit, for the information of the Government of India, a copy of telegrams reporting the occurrence of a skirmish on the 18th instant between a detachment from the Oghi Post in the Hazára District and some of the Black Mountain tribes.

2. It is with much regret that the Lieutenant-Governor reports the death of Major Battye of the 5th Gurkhas and Captain Urmston of the 6th Sikhs and four or five Gurkhas. Information has been received as yet only by telegram and the accounts are somewhat conflicting, but the main facts appear to have been somewhat as follows.

3. Major Battye, accompanied by Captain Urmston, had arrived at the Oghi Post on inspection duty, and at 5 a.m. proceeded up the Black Mountain with 58 Gurkhas of the Oghi garrison and 19 Police under the Deputy Inspector. It is stated in General McQueen's last telegram that Major Battye's object was to make himself and his men acquainted with the lie of the country and examine the water-supply. The party marched up the Barchar spur to the crest of the mountain, from which point two routes diverge, north and south. Major Battye took the northern route to Chittabat, intending to make his way back to the valley by Chorkalan and Kungali. Before he reached Chittabat the party was attacked by some Akazai and their Gújar dependents or graziers. The fire was not returned, and Major Battye pushed on, but finding that the enemy were becoming more numerous and their fire heavier, he decided to retreat down the Ater spur. The Havildár of the rear guard having been wounded, Major Battye and Captain Urmston went to his assistance with a dandy (or dooly), and while they were putting the wounded man into it, the enemy charged, and in the hand-to-hand melée which ensued both Major Battye and Captain Urmston were killed. Subadár Kishenbír, though wounded, succeeded in recovering the bodies of the two officers and in drawing off the main body of his party in safety, but four of the Gurkhas were left dead on the field and six rifles were lost.

4. Háshim Ali Khán is reported to have come down from Seri with some Khán Khel Hassanzai and attempted to cut off the retreat of the Gurkhas, but the Jaskot villagers turned out and opposed him. It is not known for certain what part was taken by the Parári Syads in the affair. The earlier telegrams stated that they attempted to cut off the retreat of our men, but General McQueen's last telegram reports that "Syads" assisted the Gurkhas. The probability is that the Parári Syads co-operated with the enemy. It is also stated that a company of the Khán of Agror's levies came to Barchar but gave our men no assistance; but this requires confirmation.

5. The Akazai have been under blockade for the last four years. The action of the Lieutenant-Governor in ordering them to be blockaded was approved by the Government of India in Colonel Ridgway's letter No. 2029 E., dated 5th August 1884. The recent correspondence regarding the Hassanzai will be within the recollection of the Government of India. The Parári Syads are included in the strict blockade ordered last April. The Lieutenant-Governor has consulted the Commissioner of Pesháwar as to the measures that will be required in consequence of this outrage, and on receipt of fuller details from the local officers His Honour's views will be communicated to you.

TELEGRAM from DISTRICT SUPERINTENDENT of POLICE, Abbott-abad, to INSPECTOR-GENERAL, Police, Punjab, Simla, dated 19th June 1888.

CONSTABLE Amír Khán reached Oghi 4 p.m. of 18th and reported Colonel Battye with another officer and all Military and Police Force present turned out at 5 a.m. and penetrated beyond border (Barchar). Party were attacked.

Troops returned fire. Colonel Battye, another European officer and a Gurkha Havildár wounded. Constable Amír Khán returned to raise country people where fighting was going on. No report received yet from Deputy Inspector.

TELEGRAM from DISTRICT SUPERINTENDENT of POLICE, Abbott-abad, to PUNJAB, Simla, dated 19th June 1888.

CONTINUATION of to-day's telegram. Deputy Inspector, Oghi, reports Colonel Battye, Gurkhas, and Captain Urmston, 6th Punjab Infantry, killed. Five Gurkhas also killed. Body of officers recovered. Six of the enemy killed.

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CONTINUATION of to-day's telegram. Deputy Inspector, Oghi, reports Colonel Battye, Gurkhas, and Captain Urmston, 6th Punjab Infantry, killed. Five Gurkhas also killed. Body of officers recovered. Six of the enemy killed.

TELEGRAM from DEPUTY COMMISSIONER, Hazára, to PUNJAB, Simla, dated 19th June 1888.

COLONEL BATTYE, with detachment Gurkhas and some Police, went up towards Chorkalan, Akazai border, yesterday. Were fired at. Battye and Captain Urmston killed. Particulars not known. Inglis has started for Agror; I follow. Please defer Inglis's transfer for present. Reasons by post. Repeated Punjab; Commissioner.

TELEGRAM from PUNJAB, Simla, to COMMISSIONER, Pesháwar, Abbott-abad, dated 19th June 1888.

THE Lieutenant-Governor has heard with great regret of the death of Colonel Battye and Captain Urmston. Further particulars awaited. No objection to transfer of Inglis being deferred. Repeated to Deputy Commissioner, Hazára.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 19th June 1888.

REPORTED by constable at Oghi:—Agror, evening 18th. Colonel Battye, 5th Gurkhas, and another officer went up at ten o'clock in morning either from Barchar or Chorkalan to boundary with Deputy Inspector Rahmut-ulla and eighteen Police. A constable returned in evening to Oghi reporting that they went up to boundary when independent territory attacked and firing began between two parties. A Gurkha Havildár, Colonel Battye and the other officer, name unknown, all three received bullet wounds. Villagers turned out to support. Fighting began. The informant returned with bullet through his turban, and without orders to report. No further news of party regarding above. Apparently all Gurkha Detachment of sixty or seventy men were with Battye and eighteen Police, so no fear of any further disaster if they have sufficient ammunition. The Agror villages near Ghanián, Jaskot, Dilbori are well armed and will support. Probably our party retired during night. I suspect enemy were Akazai only.

TELEGRAM from GENERAL OFFICER Commanding Punjab Frontier Force, Abbott-abad, to QUARTERMASTER-GENERAL in INDIA, Simla, dated 19th June 1888.

THERE has been fighting in Agror border, but no particulars received. But regret to report Major Battye and Captain Urmston both killed. Am sending out 250 extra men.

TELEGRAM from GENERAL OFFICER Commanding Punjab Frontier Force, Abbott-abad, to QUARTERMASTER-GENERAL in INDIA, Simla, dated 19th June 1888.

IN continuation of previous telegram, Thánadár, Oghi, reports that Major Battye with 58 rifles, Gurkhas, and 19 Police ascended the Barchar spur for exercise, and attempted to return by Chittabat and Kungali, just within our border line, but on the crest of the Black Mountain. The Gújars and Akazaís fired on them, but Major Battye continued to advance, when the enemy appear to have attacked them in flank and rear. Major Battye, Captain Urmston and 5 Gurkhas were killed. Khán Khel, Paráris and men of the Shamdarrah attempted to cut off retreat, but other villages assisted our men. Major Battye's and Captain Urmston's bodies were recovered, but those of the Gurkhas left on the field.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 20th June 1888.

FURTHER accounts from Deputy Inspector, Oghi, show that Colonel Battye went up Barchar spur to examine water-supply. On reaching the border about 9 or 10 a.m., instead of descending by Sambalbút, they turned north towards Chittabat. On the way they were fired at by Akazai and their Gújars; but Colonel Battye advanced through heavy forest, maintaining that he was within the British boundary. The enemy took them in front and rear. Colonel Battye, Captain Urmston, a Havildár, Náik, Bugler, and two Gurkhas were all killed. Officers' bodies were recovered afterwards and brought in. The Parári Syads seem to have closed the road of retreat on north side, and the Khán Khel under Háshim Ali Khán occupied the Barchar spur on the south. Our party came down by Hatir, where our villagers met in support. The Jaskot villagers were in action with Khán Khel in Barchar. Our party reached Oghi Post at 8 in evening. A dooly and some rifles and bodies of Gurkhas left on the hill. On 20th I shall be in personal consultation at Abbott-abad with General commanding.

TELEGRAM from PUNJAB, Simla, to COMMISSIONER, Pesháwar, Abbott-abad, dated 20th June 1888.

YOUR No. 150 and other telegrams regarding Agror border. Lieutenant-Governor expects to hear again as to reasons which induced ascent of Black Mountain by Major Battye's party and as to measures which the incident requires.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 20th June 1888.

I HAVE arrived here to attend Battye's funeral and consult Brigadier-General.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 20th June 1888.

SHALL I transfer Mannu Lál to Pesháwar temporarily? Inglis left for Agror nineteenth. Cunningham rather an invalid at Natia.

TELEGRAM from PUNJAB, Simla, to COMMISSIONER, Pesháwar, Abbott-abad, dated 20th June 1888.

YOU can either keep Mannu Lál in Hazára or post him to Pesháwar as you think best.

TELEGRAM from DEPUTY COMMISSIONER, Hazára, to PUNJAB, Simla, dated 20th June 1888.

REPORT from Thánadár shows Colonel Battye went out for reconnaissance only to examine water-supply on Black Mountain. Took 58 Gurkhas, 17 Police, with Deputy Inspector. Went up Barchar spur to crest, thence towards Chittabat peak, intending to return down Kungali spur. See Revenue Survey Map, Agror sheet. Deputy Inspector states he represented danger of meeting Akazai and Gújar squatters and graziers' camps, but was overruled. Before they reached Chittabat, Akazai and Gújars attacked them in forest and followed, firing as numbers increased. Our party was attacked from front and rear. Battye, Urmston, a Havildár and three or four sepoys shot. Party retired down Ater spur. Two swords, Battye's and Subadár's, lost. Six rifles lost. Six of enemy killed. Firing attracted Paráris, who came to cut off retreat. Men of Agror villages came out to assistance. Some Khán Khel with Háshim Ali Khán from Seri came down Barchar spur to cut off retreat by that route. Jaskot villages had skirmish with them there; report the Khán's company came to Barchar, but gave no help against the Khán Khel. Will report further from Agror by letter.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 20th June 1888.

I STRONGLY suspect that the opposition to Colonel Battye was unpremeditated and by the Gújar graziers and Akazai surprised by troops; that Battye was getting the villagers accompanying him and troops off the crests of the mountain in retirement when enemy suddenly fell on him personally and his companions bringing up the rear with the results reported. One Gurkha sepoy reported dead has come in.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 20th June 1888.

I HAVE advised Cunningham to remain at Natiagali and not go to Agror, as Inglis is there, unless he sees special reasons. Better keep quiet.

TELEGRAM from PUNJAB, Simla, to COMMISSIONER, Pesháwar, Abbott-abad, dated 21st June 1888.

IF you think advisable on account Cunningham's health that he should stay at Natiagali, Lieutenant-Governor agrees to his doing so.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 20th June 1888.

I PROPOSE addressing Akazai, Hassanzai and Parári Syads and demand explanation why they, on the eighteenth, entered British territory armed and interfered with and attacked British troops and villagers within British territory, and saying that the restoration of all property taken by Akazai will be insisted upon as well as compensation for damage done.

TELEGRAM from PUNJAB, Simla, to COMMISSIONER, Pesháwar, Abbott-abad, dated 21st June 1888.

LIEUTENANT-GOVERNOR agrees to your calling on the Hassanzai, Akazai and Parári Syads, whenever you think advisable, for explanation why they entered British territory armed and attacked British troops and villages. He considers that at present it will be sufficient to ask for explanation. To demand restoration of property and compensation for damage might have appearance of agreeing to accept such acts as a settlement, which must be avoided.

TELEGRAM from GENERAL OFFICER Commanding Punjab Frontier Force, Abbott-abad, to QUARTERMASTER-GENERAL, Simla, dated 21st June 1888.

IN continuation of previous telegrams. Reinforcements reached Oghi yesterday. All quiet. Further details modify previous reports. Party ascended Barchar spur and pushed along crest towards Chittabat, being fired at *en route* near Gújar huts by Gújars and Akazaís. Fire was not returned, but party pushed on until enemy became more numerous, when retirement was ordered, covered by small rear guards. Havildár of guard was wounded, and Major Battye and Captain Urmston, who was unarmed, went to his assistance, taking dandy. Main body meantime, unaware of what had occurred, continued retirement. While standing round dandy sudden rush was made, in which, after hand-to-hand fighting, Battye and Urmston fell. Subadár Kishenbír, though wounded, escaped, and rejoining main body led them back and recovered bodies assisted by Syads. Enemy known to have lost six killed. Major Battye evidently desired to avoid fighting but to assert his rights to move his men within our own border. His original object was to make himself and men acquainted with lie of country, water-supply, &c. Full details cannot be known for another day or two, till Major Thompson's report received. Communication with Agror, 35 miles distant, very slow and difficult.

TELEGRAM from COMMISSIONER, Pesháwar, Abbott-abad, to PUNJAB, Simla, dated 22nd June 1888.

AM afraid it was an unnecessary military reconnaissance in contravention of Oghi Standing Orders. The Oghi garrison has been strengthened. Agror quiet. No signs of tribes threatening as yet. The tribes will be called upon for explanation of their attack on British troops and villages in British territory. I recommend no further measures immediately. Report follows to-day.

ENCLOSURE No. 23.

From OFFICIATING SECRETARY to GOVERNMENT, Punjab and its Dependencies, to SECRETARY to the GOVERNMENT of INDIA, Foreign Department, dated 30th June 1888.

IN continuation of my letter, dated 23rd instant, I am desired by the Lieutenant-Governor to forward, for the information of the Government of India, further papers relating to the recent occurrence on the Black Mountain which resulted in the death of Major Battye, commanding the 5th Gurkhas, and Captain Urmston and some of the Gurkha guard. Sir James Lyall will postpone any expression of his views in regard to this occurrence until he has received the report of the General commanding the Frontier Force and the reply of the Deputy Commissioner of Hazára to Colonel Waterfield's letter, dated 23rd June to that officer's address.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Abbott-abad, 21st June 1888.

IN reply to your telegram of 20th, I have the honour to report, somewhat hurriedly perhaps, for the information of His Honour the Lieutenant-Governor that the facts of the case have been given with almost sufficient accuracy in my telegrams of the 19th, and 20th instant.

2. We may feel certain that Major Battye ascended by the Barchar spur, examined the water-supply near the top about 11 a.m., declined to retire south and south-east, and down the Sambalbút spur to his left, but turned to his right along the mountain, intending to come down by the Chittabat and Manna-ke-Danna spur and the Chorkaln village to the Jál Galli Pass and so into the Agror Valley. He was fired at and stones were rolled down upon him by two or three men, but he persisted in his advance, declaring, it is said, that he was inside the British boundary and within his rights. He is also said to have remarked that the men who opposed him in this manner were "chor log" which I should translate not as "thieves" but simply as scoundrels who were not acting against him as it were on behalf of, and by consent of, the tribe, but interfering with him as he moved along below them out of sheer mischief. Major Battye would not let his men get out their cartridges or return the one or two shots which had been fired at him. Then as he advanced I have no doubt that he really surprised a hamlet of Gújar graziers and Akazai or their tenants with their cattle. One report says that the men came running in from the ground near to attack, and another report says that our party found the cattle quietly in their sheds. Had the Akazai or Gújars expected an attack or formed an ambuscade, or had they had time to organize any resistance, the very first thing they would have done would have been to drive off their cattle into a place of safety. About this spot or beyond it, and out of the forest, and under the bare rocky ground of the Chittabat height, a Gurkha Non-commissioned officer was wounded by a bullet, and Major Battye came back from the front, and he and Captain Urmston and the Subadár of the Gurkha Company and the Native Doctor and others appear to have for some time collected round the dooly in which the man was placed, and they probably halted, seeing to the wounded man. Meanwhile the main body of the Gurkhas and Police had gone on, and were no doubt some distance in advance down the hill when Major Battye and his small party were attacked from the rear and the fight took place in which both officers lost their lives with another Gurkha Non-commissioned officer and a sepoy. The detachment had to return afterwards under the Subadár with some Syads of the village of Chorkaln to recover the bodies. They found them completely stripped and plundered of everything. Captain Urmston was not in uniform and had no weapon with him—nothing but a stick in his hand. He was perhaps killed with an axe. He had even endeavoured by fastening his handkerchief to this stick as a white flag to make their assailants see that they were not intending to fight. This, however, had no result. The rest of the story has, I think, been sufficiently clearly told, save that one of the missing Gurkhas from Major Battye's party who were with the dooly came in next morning. He had been able to conceal himself in a ravine. Our casualties were, therefore, Major Battye, Captain Urmston, a Havildár, a Náik and a sepoy killed and a Bugler missing. This was a boy, and it is thought that he may not have been killed, but have been carried off. The Subadár-Major is said to have killed 6 or 9 men, and Major Battye one who personally attacked him, when he, Major Battye, was shot in the neck from behind. The Military reports may correct these details.

3. As to the reasons which induced Major Battye to ascend the Black Mountain and take the course he did along its crest due north towards Chittabat, I have little doubt that he felt that he was making an allowable reconnaissance within British territory. He wished also to see about the water-supply, and he knew that the Sambalbút spur was occupied by a new tower and held by 70 men of the Khán's levies, and he knew that the Deputy Commissioner of Hazára had been placing a similar tower on the Barchar spur when its construction was stopped by the Brigadier-General commanding during his visit to Agror in April. He knew that both these places had been visited by our officers, and I dare say he thought that as a Commanding

Officer visiting his outpost at Oghi he was not necessarily bound by the Oghi Outpost Standing Orders, which he might have considered to have been issued for the guidance of the young officers out on detachment duty in the Oghi Fort. They are in fact issued for the Oghi detachment.

4. I read these Orders over when I was out in Agror in May, and, finding that they were rather difficult of comprehension owing to successive orders more or less modifying those that had been first issued, I brought his to the notice of the Brigadier-General and suggested that these Standing Orders might with advantage be re-written and made clearer, so that the instructions might be quickly seen without having to wade through successive new orders to the end. The General commanding was good enough to enquire into the matter and the Orders were reframed. Nothing can be clearer from these than that an officer must not advance up the Black Mountain save in pursuit of an enemy.

I think, too, that at the time Major Battye had taken upon himself the command in Agror, having sent in to Abbott-abad the one officer on detachment duty and himself awaiting the arrival of the other officer coming out in relief.

We may feel certain that if Major Battye had read the Outpost Orders, and believed that they applied to him as strictly as to any young officer in command of the Oghi detachment, he would never have made the reconnaissance he did.

5. As to the measures which the incident requires. I shall direct the Deputy Commissioner to address the Akazai and demand of them why British troops and Police were interfered with by them in British territory. The tribe may or may not reply, but they could no doubt answer that British troops have never been seen on that ground on the summit of the Black Mountain save with hostile intentions, that they had had no warning, and that their Gújars and tenants or tribesmen had been suddenly surprised and had at first acted in self-defence and then concluded that they had gained, by their sudden and determined attack, an advantage and a victory. The above would be a not unreasonable explanation if they chose to give it. What they will probably say is that they were attacked by, and yet defeated, our troops.

It so happens that Major Battye would not allow the shots fired at him to be returned, except that on one occasion he let the four or five men with him fire a volley to frighten their assailants. No ammunition to speak of was expended by our party. Major Battye throughout seems to have been determined to avoid, if he possibly could, any collision, and the men of independent territory who attacked him no doubt mistook the absence of a good defence and were emboldened thereby.

6. I also shall direct the Deputy Commissioner to demand of the Hassanzai why the Khán Khel came into British territory down the Barchar spur and so into collision with the Jaskot villagers, killing one man. (They themselves lost two lives.)

7. The Deputy Commissioner will also ask the Parári Syads how they appeared on the Manna-ka-Danna spur on the road which our troops might have taken ontheir way down to the Jál Galli, which is the point in the north-west corner of the Agror Valley for which Major Battye by all accounts was making from the time when he turned along the ridge of the Black Mountain towards Chittabat. Hassanzai and Parári Syads may reply that they assisted in repelling an intended attack on them which had failed.

But the above is, I consider, the proper course in all such instances,—to communicate to the tribes the conduct they are charged with, and give them the opportunity of understanding the situation and of knowing for what they will be called to account hereafter.

8. I had anticipated directly this affair occurred that the Akazai would expect retaliation, send round trophies, arms, clothes and other things secured from the bodies of the officers and call upon neighbouring tribes to prepare for defence. I hear that this took place.

My last information, however, is that the Akazai decline to join in any aggression, although they are said to have been incited thereto by Háshim Ali Khán, Khán Khel Hassanzai. Whether this is true or not we cannot yet tell, but at all events any such incitement to make a raid on Agror has

so far had no results upon the Akazai.. This tribe has to bury some seven or more men killed in this fight.

9. This occurrence will certainly have disturbed the border somewhat, and a detachment from the Hindustáni Colony is expected to appear again for the defence of the Khán Khel village of Seri and of Háshim Ali Khán; but although I was prepared for a repetition of history and for the raiding upon Agror of independent tribes emboldened by their apparent success, and with the object of making the Government consider whether it would not be better to send back the Khán to Agror, yet I am now fairly satisfied that nothing of the kind will occur, that the excitement will pass away, and that there will be no demonstration against the Agror Valley.

10. If it be suggested that the Khán of Agror may have been in some way connected with this opposition to Major Battye and his party, we can be pretty certain that such is not the case. The story is a simple one, and there is no reason to look for any secret spring working the machinery.

I do not say whether the Khán of Agror and Háshim Ali Khán may or may not be in communication with each other, and discussing what the result of a raid by independent territory upon Agror during his (the Khán's) absence from the Hazára District might be,—whether it would be favourable to the Khán's cause and bring about his return or still further damage his interests,—but we see that there has been as yet no results from those deliberations and counsels, and I do not think that any such move will be made.

There is so far nothing to connect the Khán or his brother and agent in Agror or his people in any way with the occurrence which is now being reported.

11. The garrison in Oghi was at once strongly reinforced from Abbottabad by the order of the Brigadier-General commanding the Punjab Frontier Force, and a Military enquiry is now going on in Agror to ascertain how these occurrences came about and what were the facts, but I think we may anticipate the report.

We shall probably hear that messengers have gone forth to inform all neighbouring tribes of what has occurred, yet I think this will be to engage their alliance for defensive measures solely and not for attack. Nothing but a descent *en masse* of the independent tribes on Agror would disturb the valley, and I do not believe that we shall hear of this. The Hassanzai (except the Khán Khel) will be held back by the Nawáb of Amb, and the Khán Khel section and Akazai tribe will not care to act alone, and I think neighbouring tribes will be shy about committing themselves in any cause in which a blockade has begun and a military expedition may be perhaps impending.

12. At present, therefore, I do not see that the incidents require any further measures. The border is I hope safe, and a settlement on account of these deaths of British officers and soldiers and the recovery of their property can be demanded either now or when the final understanding with the Black Mountain tribe is arrived at, and if the Government decide that these officers did not fall in what may be called a fair fight with savages, the victims of their own sad indiscretion and noble desire not, unless driven to the last extremity of self-defence, to inflict an injury upon their barbarous assailants.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated Abbott-abad, 23rd June 1888.

I HAVE received copies of two telegrams despatched by you to the Secretary to Government, Punjab, and your demi-official of the 19th. Now that you have reached Agror you should submit a brief report of the occurrences which led to the death of Major Battye, commanding 5th Gurkhas, and of Captain Urmston and of some of the Gurkha guard accompanying him, and of the attack upon the Gurkha detachment and Police on the Black Mountain near the Chittabat peak on the 19th instant.

2. You will no doubt notice that Major Battye spoke of his intentions about 4 p.m. on the previous afternoon to the Deputy Inspector of Police, and you should ascertain whether Rahmat-ulla Khán, the Deputy Inspector of Police,

had seen and read the Oghi Standing Orders recently re-issued, which are on a board at the gate in English and Vernacular, and if so, why did he not call Major Battye's attention to the prohibitory order.

3. It is of some importance to ascertain with as much certainty as possible who the assailants were—Gújars, or Akazai tenantry, or Akazai. The bodies of the 6 or 7 of the enemy killed were recognized probably by the Syads of Chorkalan who went up to recover the bodies of the two officers, and their names were given. The Syads will know who the assailants were and what loss they actually suffered, and whether the independent tribesmen were surprised or on the contrary were in any way prepared for the defence. All circumstances that have come to light hitherto would lead us to suppose that so far from there being an ambuscade, the tribesmen, graziers and others on the hill were taken by surprise at the appearance of the Gurkhas.

4. If the Chorkalan Syads behaved well in helping to recover the bodies of the dead, their services should be brought to notice, also the conduct of the Jaskot or any other villages who were forward in doing good work. If the wounded Jaskot man died, perhaps some compensation might be given to his family.

There was a report which said that the Mirza commanding the Khán's levies in the Sambalbút tower had not rendered effective assistance, but the question is what he could have done? It takes some time for people to get from Sambalbút to Barchar, and it is to be ascertained what men he had at Sambalbút, and how they could have acted better.

The Mirza should explain why he did not with his men lead Jaskot villagers up the hill to drive back Háshim Ali and his followers on the Barchar spur. A recent report would seem to show that Háshim Ali Khán and his Khán Khel from Seri only appeared at the top of the mountain above the Barchar spur, and perhaps they did not come down it, and were attacked by the Jaskot village. It should be ascertained, if possible, also whether the Parári Syads and their followers actively opposed our party in any way.

5. You should now address the Akazai and request them to explain how they appeared armed in British territory and assailed British troops and killed British officers; that this is a new offence with which they are charged and for which they will be called to account. You should also address the Hassanzai and the Parári Syads and any other tribes concerned in the affair and ask them to explain how it is that they are said to have entered British territory armed and to have threatened or interfered with British troops and Police. The Hassanzai should be called upon to explain their killing or wounding a man of the Jaskot village.

You can send the communications at once direct and need not send any draft to me for approval.

6. I had intended informing the Akazai that they would be called upon to give up the property of the officers and men killed,—the pistol, sword, watch, clothes of Major Battye and of Captain Urmston, and the clothes, rifles and accoutrements of the Gurkhas, and the dooly. In case, however, that the tribes should think that this surrendering of property will be taken as any settlement of the offence committed, His Honour the Lieutenant-Governor thinks that such a demand had better not be made in that manner.

I am afraid of this property being distributed by the possessors and parted with and so becoming irrecoverable. I therefore think that you should send the Syads of Chorkalan or other trustworthy persons to inform the Akazaís verbally that the restoration of this property will certainly be one thing demanded hereafter, and that they had better restore it now or retain it and not allow it to pass from their hands.

P.S. With reference to paragraph 2 above, surely the Deputy Inspector of Police, Rahmat-ulla Khán, knew that for some time past the Hassanzai and Akazai have had sentries posted upon the crest of the Black Mountain and have been upon the alert expecting attack from Agror. Did he inform Major Battye of this and that there was danger of those sentries giving the alarm and of opposition resulting, and when the sentries first opened fire on the Gurkha detachment above Barchar and stones were rolled upon or thrown at the troops, did Rahmat-ulla Khán explain to Major Battye that this meant the alarm would be given, and that opposition might be expected?

The conduct of Rahmat-ulla Khán as the Deputy Inspector of Police in Agror requires careful consideration.

EXTRACT PARAGRAPH 1 to 3 of a LETTER dated Simla, 30th June 1888, from OFFICIATING SECRETARY to GOVERNMENT, Punjab, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division.

I AM desired by the Lieutenant-Governor to acknowledge the receipt of your letters, dated 21st and 23rd instant, relating to the recent occurrence on the Agror border which resulted in the death of Major Battye, commanding the 5th Gurkhas, and Captain Urmston, and of some of the Gurkha guard accompanying them.

2. You have already been authorized by telegram to demand explanations from the tribes concerned, and your letter to the Deputy Commissioner, dated 23rd instant, shows that these instructions have been carried out.

3. The Lieutenant-Governor is not quite certain from these letters whether Major Battye's party after ascending the Barchar spur got on to the top of the Black Mountain watershed ridge (which is, His Honour understands, the recognized border line) and then followed that watershed line to Chittabat and Manna-ke-Danna, or whether the party kept below the actual border line and worked their way along the slopes through the forest. Sir James Lyall wants this point, which is of some importance, clearly explained.

ENCLOSURE No. 24.

From OFFICIATING SECRETARY to the GOVERNMENT of PUNJAB, to the SECRETARY to GOVERNMENT of INDIA, dated Simla, 30th July 1888.

IN continuation of the correspondence ending with the letter from this office, dated June 30th, 1888, I am desired by the Lieutenant-Governor to submit, for the information and orders of the Government of India, a copy of the letters from the Commissioner and Superintendent of the Pesháwar Division, with enclosures, relating to the affairs in Agror and to the recent occurrence on the Black Mountain which resulted in the death of Major Battye, commanding the 5th Gurkhas, and Captain Urmston and four men of the Gurkha guard.

2. The Lieutenant-Governor considers that the report of the Deputy Commissioner of Hazára, which forms the enclosure of the Commissioner's letter, dated the 12th of July 1888, gives a clear and unprejudiced account of the occurrences of the 18th of June last, which may be relied on. On the question whether the Khán Khel Hasanzaís and the Akazai tribe got notice of the intention of Major Battye's party to ascend the Black Mountain, Sir James Lyall thinks that they received no notice, or no notice on which they acted, till the morning of the 18th of June, when no doubt information was sent over the mountain.

3. In the opinion of the Lieutenant-Governor it is clear that Major Battye's party during their march did not cross the British boundary (*i.e.*, the watershed), and apparently never actually touched it except perhaps at Bamphor Galli, the point where the Barchar spur connects with the main ridge of the mountain. From that point the party seems to have followed a path below the ridge on the Agror side of the mountain, and must have been well below the ridge when first attacked by the enemy rolling down stones and firing from above. At the place where the final attack occurred and the British officers and men were killed and wounded, the party was much below the boundary. At the same time, though the watershed of the ridge is well known by all to be the boundary of Agror, and therefore of British territory, yet, practically, the upper eastern slopes of the mountain have been looked upon by the Agrorwáls and their Trans-border neighbours as a sort of neutral ground used by them both in quiet times, but out of the beat of our police and troops, and actually less in our possession than in that of the Trans-border tribes in time of blockade or hostilities. Hence, though the Akazai

Gújars and Ledhs, who had collected and were watching the movements of Major Battye's party, must have known surely enough (both from the look of things and from the previous withdrawal of the additional troops from Agror) that no attack on them was meant, and that the party was within the Agror boundary, yet the sight of British officers and Gurkha soldiers struggling along the slopes through the forest below was a great temptation to these people to show their defiance and give vent to their animosity by firing and rolling down stones on the party, whose purely defensive and retreating action, coupled with unfortunate accident, led naturally to the catastrophe which followed. In ordinary times of peace the Akazaís might not have gone beyond threatening demonstrations, but in their present state of mind the temptation was too much for them. It must be remembered that the Khán Khel Hasanzaís and the Akazaís mustered on this ridge defiantly in the spring after the Agror garrison had been increased and when they strongly suspected that a move across the border to punish Háshim Alí Khán was being meditated. No doubt these tribes, or the ignorant and hot-headed majority at all events, have flattered themselves that we were frightened off by those demonstrations, and in consequence are more than usually pugnacious and contemptuous.

4. The excuse now advanced by some members of the Akazaís, that the Police with Major Battye's party entered the Gújar huts on the mountain and insulted Gújar women, is undoubtedly a mere invention; the Lieutenant-Governor thinks, however, that it shows that the Akazai headmen know that the conduct of their vassals was inexcusable. The Deputy Commissioner of Hazára, in paragraph 2 of his letter of the 30th June, writes that the Hasanzaís and Akazaís at the time of the attack were and "are now practically at war with the British Government." Without denying that this is true in one sense, Sir James Lyall thinks that, if used as an excuse for the occurrence of the 18th of June, it is not an admissible argument; for the Trans-border tribes understand well enough the difference between a blockade and declared hostilities. If British troops or Police during a blockade were to arrest peaceable men across the border, the tribes would promptly and energetically protest against such action as unfair, and they know that it would be repudiated by Government. In spite, therefore, of all that can be said as to the indefinite nature of the border line and other circumstances, the occurrence of the 18th of June forms, in the Lieutenant-Governor's opinion, a strong *casus belli* against the Akazaís; and the fact that two British officers were killed and stripped in a savage and disgraceful manner, is an incident which, logically or illogically, must be regarded in our position on the border as gravely aggravating the importance and urgency of the case.

5. The question thus arises whether the Akazai clan alone should be held responsible for the occurrence of the 18th of June or whether we should also hold liable Háshim Ali Khán and the Khán Khel section, or not only them but also the whole Hasanzai clan. As to this point Colonel Waterfield in paragraph 7 of his letter writes as follows:—

I agree with the Deputy Commissioner that the occurrences of the 18th do not alter the situation of affairs between Government and the Hasanzai, but the Hasanzai will recognize that their Chief has made another move which will tend to embroil them still further with the Government. Hasanzai and Akazai must be dealt with apart.

The Lieutenant-Governor does not think that this view can be accepted; not at least without much qualification. It must, he observes, be remembered, in the first place, that though the power of Háshim Ali Khán, except in his own Khán Khel section, is in ordinary times slight, he is the admitted Chief of the whole Isazai branch of the Yusafzai Patháns, which comprises the Hasanzai, Akazai and Madda Khel clans. The Madda Khels may be left out of account, as they live at a distance and have made, so far as is known, no move in the matter; but the occurrence of the 18th of June may, Sir James Lyall thinks, be properly treated as part and parcel of the offences for which we are now proceeding against Háshim Ali Khán and the Hasanzaís; and the Akazaís must be held to have clearly identified themselves as parties in that quarrel. That quarrel, in its present phase, arose from the murders and kidnapping of British subjects at Udigraon in January last by Háshim Ali

Khán as a counter move to the arrest of his servant Turrabáz. To secure himself against the attack which he expected from us, Háshim Ali at once endeavoured to have his action endorsed by his whole tribe, and there is no doubt that he succeeded so far as the Akazaís and one party of the Hasanzaís are concerned.

The Khán of Agror in his letter dated the 8th of November 1887, in which he protested against the arrest of Turrabáz, said that this arrest would lead to the commission of raids on the part of both Hasanzaís and Akazaís.

Háshim Ali Khán in his reply (which is undated, but was written about the end of February 1888) to a letter from the Deputy Commissioner, demanding the release of his prisoners, said that he could not comply without consulting his tribe, the Hasanzaís, Akazaís and Madda Khels, who, he stated, had consented to or approved of his act.

The Akazai Jirga in a letter (also undated) to Háshim Ali Khán, considered genuine by the Commissioner of Pesháwar as well as by the Deputy Commissioner of Hazára (see Deputy Commissioner's letter No. 495, dated 12th March 1888), advised him not to release his captives.

The Deputy Commissioner of Hazára, in his letter dated the 28th of March last, to the Commissioner of Pesháwar, apprehended that the Akazaís would certainly support Háshim Ali if he were attacked; and in his No. 785, dated 24th April 1888, to the Commissioner of Pesháwar, Mr. Cunningham said that half of the Hasanzai, the Akazai and the Hindustánís of Palosai would support Háshim Ali Khán in any case.

In the letter from the Hasanzai Jirga, dated 1st April 1888, the writers pointed out that Háshim Ali Khán was also Chief of the Akazaís and Madda Khels, that they alone could not control him, and that he would be assisted by Akazaís and Madda Khel, if the Hasanzaís alone tried to coerce him.

In the early spring, when Háshim Ali Khán was led by the receipt of summons to release his captives and by the reinforcement of the garrison at Agror to expect attack and in consequence collected his followers and some of the Hindustáni fanatics on the Black Mountain, it is well known that the Akazaís took an active part in those preparations.

When the Government of India decided (*vide* your letter dated 25th May 1888), with reference to the offences of Háshim Ali Khán and the separate case of the Parári Sayads, that operations were to be restricted to a blockade, and formal announcements were accordingly sent to the Hasanzaís and the Parári Sayads, such notice was not sent to the Akazaís because they had been officially under blockade since 1884, had never offered to come to terms, and had also been guilty of several petty raids and offences; but it was well understood that the tribe was included in the strict blockade which has been recently announced, and the Deputy Commissioner of Hazára reminded the Nawáb of Amb that the Akazaís were so included, and directed him to seize all members of the tribe when found in British territory.

6. The conclusion which the Lieutenant-Governor has drawn from the facts recited in the preceding paragraph is, that the Akazaís should be told that they will be held responsible, not only for the attack on Major Battye's party on the 18th of June last, but also for their active endorsement of Háshim Ali Khán's raid on Udigraon, of which endorsement this attack is considered to be part and parcel. This would not, of course, prevent our making a separate settlement with the clan at any future time if that were found possible and advisable as a matter of policy. Sir James Lyall also thinks that Háshim Ali Khán and the Khán Khel Hasanzaís should be told that they too are held responsible for the attack on Major Battye's party, not merely because of their descent on the Barchar spur on the same day, but also because the Akazaís' attack is regarded as a part of the hostile attitude which that clan adopted at the request of Háshim Ali Khán in connection with the Udigraon case.

As regards the Hasanzai clan generally, apart from the Khan Khel section, the question seems to the Lieutenant-Governor to depend upon the line of action to be taken. So long as the process of blockade is adhered to there is no change in the situation. In deciding to proceed by that method it was arranged to hold the whole Hasanzai clan responsible for the offences of Háshim Ali Khán. If, however, it is decided to have a military expedition, then the Lieutenant-Governor considers that the best policy would be, as was

originally contemplated by the Punjab Government, to direct the attack, so far as the Hasanzai clan is concerned, against Háshim Ali Khán and the Khán Khel section only, and to inform the remaining sections of the clan that they will not be attacked unless they join in arms against the British forces.

7. It may be inferred from paragraph 6 of the Commissioner's* letter that he is still in favour of proceeding against the offending tribes by blockade only, and though, as will be seen from his letters now forwarded, he entertains great distrust of the Nawáb of Amb, yet he nevertheless believes that, impelled and aided by the inconveniences of the blockade, the Nawáb will in the end be willing and able to induce the Hasanzaís and Akazaís to come to terms and comply with the reasonable demands of Government. What additional demands, if any, should be made in reparation for the occurrence of the 18th of June he does not say. The Deputy Commissioner is not so sanguine, and also expressly says that in his opinion the fines formerly determined on are the utmost which it is possible to exact by the process of simple blockade, and that therefore no attempt should be made to realize by that process any additional fine on account of the occurrence of the 18th of June. He is evidently very doubtful whether it will be possible to realize so much as the original fines, but hopes that the Nawáb of Amb, through his faction of the Hasanzaís, may be able at all events to secure the release of the two men kidnapped by Háshim Ali Khán, which has been demanded as a necessary preliminary to the reception of the Hasanzai Jirga, and so open the door for a settlement with the tribes.

* Dated 12th July 1888.

8. The Lieutenant-Governor concurs in the opinion of the Deputy Commissioner of Hazára that the release of the two captives and the payment of the fines formerly proposed are the utmost which is likely to be obtained from the tribes by the process of blockade, even with the help of the Nawáb of Amb; and his impression is that it will take a long blockade and repeated negotiations to secure so much. The report of the intentions of the party among the Hasanzaís who are pacifically inclined, which the Deputy Commissioner of Hazára makes in paragraph 6 of his letter, dated the 30th June 1888, shows the nature of the demands which the Hasanzai and Akazai jirgas would put forward if they now came in and surrendered the captives. Sir James Lyall has no doubt that, in addition to demanding the release of the life-convict Turrabáz, the jirgas would also demand still more obstinately the release of, and a free pardon for, the Khán of Agror and his agent Fazl Ali Khán. His Honour was, from the first, of opinion that the case against Háshim Ali Khán and the Khán Khel section of the Hasanzaís (with reference not only to its own proper gravity, but also to the recalcitrant and overbearing attitude which all the tribes on the borders of the Hazára District have assumed towards the Government) was hardly one in which it was possible to wait for a tardy reparation. The occurrence of the 18th of June last, His Honour considers, makes it still more difficult to wait with dignity. In fact, Sir James Lyall is decidedly of opinion that, on political grounds, a punitive expedition is now very desirable, and should be sanctioned if the Military authorities consider that it can be carried out without risk of failure and at no very great cost. Pending a further expression of the views of the Government of India, Sir James Lyall has not consulted General McQueen on these points, but he understands from a letter which he has seen that that officer is of opinion that our relations with the independent tribes on the Hazára border cannot be put straight without the use of force.

9. If, however, the Government of India consider that for certain reasons it is advisable, in spite of recent occurrences, to adhere to the peaceful policy which has been adopted towards the offending tribes, then it must be considered whether the proposals of the Deputy Commissioner of Hazára for rendering the existing blockade more vigorous and effective should not be adopted.

As to the proposed expulsion of men of certain tribes, Sir James Lyall considers that there will be nothing unfair in such a measure if really old settlers are excluded, and only all those Hasanzaís and Akazaís with their dependants, who are servants or tenants-at-will in Agror, and come to and

go from British territory from time to time, are expelled. Such people have not lost, so to speak, their domicile across the frontier, and still have houses to which they can return on the other side of the Black Mountain. But the objection to this course is that it would exasperate the men expelled and the clans to which they belong, and would probably induce frequent raids on Agror, which, in the end, would force the British Government into military operations across the border.

With reference to the difficulty of recovering more than a very limited sum by way of fine from these tribes, the suggestion thrown out by the Nawáb of Amb * might, the Lieutenant-Governor considers, be adopted in support, or rather in continuation, of proceedings by blockade; that is to say, a penal *zikát* or customs fee might be imposed for a term of years when the tribes eventually submit and the blockade is removed: it would be imposed, not only on the Tanáwal, but also on the Agror borders. In this way full punishment of a kind might be inflicted in time. But this imposition also would be resented by the clans, and would keep them in a sulky temper, if it did not provoke them to much violence.

* *Vide* Commissioner's, dated 6th July 1888, paragraph 3.

10. If, however, it is now considered by the Government of India that the situation is changed and that military action is advisable, the Lieutenant-Governor is of opinion that endeavours might be made to limit its scope as far as possible. With this object he considers that a peaceful settlement with the Parári Sayads and their Chiggarzai tenants and allies might first be attempted. The communications recently received by the Deputy Commissioner of Hazára from the Parári Sayads, as reported in the letters, now forwarded, show what has been known all along, that these people will be ready to come to terms so soon as they are convinced that the Government is in earnest and intends to use force. It is not important, however, to use force against the Parári Sayads, because they know that British troops can enter their country whenever it is considered advisable. What seems really important is to convince the Khán Khel Hasanzaís and the Akazaís that their villages on the other side of the Black Mountain are not safe from attack.

To appease the Chiggarzaís and also to settle a claim which in the opinion of the Lieutenant-Governor is more or less just, His Honour considers that Government might authorize the Deputy Commissioner to promise, on condition of their good behaviour, to do something for Amín Khán, the son of Abdullah Khán of Dilbori, though not for Abdullah Khán himself, who should remain in exile for his offences. Hitherto such assistance has been refused out of deference for the Khán of Agror, but as the Khán is now under detention for treasonable practices, the situation has changed and it may be advisable to grant some allowance to Abdullah Khán's son; and it might be made a condition of the Khán of Agror's restoration (if he is ever restored), that he should give the son, in lieu of the allowance, some part of the jagir which the father held.

In the same way, the Lieutenant-Governor thinks that the Hasanzai clan might be told that the expedition will be directed simply against the Khán Khel section and the Akazaís, unless the other sections of the Hasanzaís take sides against it; but that in such case not only will they be included in the attack and their villages be harried, but that at the conclusion of the war the *zikát* or customs dues will be re-imposed on them all along the Hazára border. With these threats and with the influence of the Nawáb of Amb with his faction among the Hasanzaís, the Lieutenant-Governor thinks that it may be possible to at all events create a division in the clan.

The Madda Khels also, he considers, might perhaps be influenced in the direction of holding aloof from Háshim Ali Khán and the Khán Khels by similar arguments.

11. The letter from the Deputy Commissioner of Hazára, dated the 4th of June 1888, which forms the enclosure of the letter from the Commissioner of Pesháwar, dated July 6th, is, the Lieutenant-Governor observes, now somewhat out of date owing to the delay in its submission, which is explained by Colonel Waterfield. But it furnishes a good explanation of the difficulties in which the Nawáb of Amb is placed by the orders for a blockade of the

Black Mountain tribes. The doubts which the Commissioner has expressed in paragraphs 2 to 5 of his letter, marginally noted, as to the "perfect loyalty" of the Nawáb, are not surprising: it would, Sir James Lyall thinks, be almost extravagant to expect so much from a man of the Nawáb's class when his interests and those of the British Government are not quite the same. But His Honour sees no reason to differ from the general opinion which the Deputy Commissioner of Hazára holds of the past behaviour of the Nawáb towards the Government. At the same time he does not attach much weight to the opinion of the Nawáb expressed to the Commissioner of Peshawar, that a military expedition aimed against Háshim Ali Khán would be opposed by a general combination of the tribes united in a "Jehad"; nor does he anticipate any combination of the tribes at which alarm need be felt. Information obtained from Pesháwar as well as from Hazára goes to show that the applications for assistance made by Háshim Ali Khán to the Bonerwáls and Swatís have been refused on the ground that the quarrel is not one which concerns those tribes; and this is the line which, in Sir James Lyall's opinion, those tribes may be expected to take and to adhere to. Similarly, the Lieutenant-Governor is not disposed to attach much importance to the opinion of the Nawáb as expressed to the Deputy Commissioner of Hazára that the imposition of a blockade would be ineffectual. The fact is that these utterances may or may not be the expressions of the Nawáb's real opinion, but in any case he would be disposed to talk in this manner, as he must naturally dislike the blockade, and also any military expedition which would be sent against the whole Hasanzai clan, his own faction included. He would, of course, prefer, if possible, to be the intermediary of Government in patching up a settlement, as his power and influence would be increased thereby. His plan of setting up Ibráhím Khán as a rival to Háshim Ali Khán for the post of Chief of the Isazaís, alluded to in paragraph 3 of the Commissioner's letter, dated July 6th, 1888, is not, in the opinion of Sir James Lyall, likely to succeed till Háshim Ali Khán's power and prestige have been broken; and as a measure by itself, to be arranged by intrigue and expenditure of money, is hardly one to which approval would be given. The Lieutenant-Governor agrees with the Commissioner* in thinking that no apprehension need be felt at the suggestion of the Nawáb that the Hasanzaís may attack the people engaged in the wood trade on the River Indus.

Dated 6th July 1888.

* Paragraph 6.

12. In respect to other points discussed in the letters referred to in the preceding paragraph, it may be noted that some time back the Commissioner of Pesháwar was authorized to include the Hindustáni fanatics of Palosai in the blockade, should he think it proper to do so. Colonel Waterfield has now reported that he has instructed the Deputy Commissioner that this should be done; and the measure has the Lieutenant-Governor's approval. The Deputy Commissioner of Hazára was also requested to report the names of those members of the family of Fazl Ali Khán whose deportation from Agror appeared to be necessary. Preliminary approval to the detention of such members has since been received from the Government of India.

13. I am to add that, in order to avoid lengthening this letter, His Honour has expressed his views on certain minor points and on some of Colonel Waterfield's arguments in marginal notes which have been printed with the Commissioner of Pesháwar's letter, dated the 12th July.

14. In respect to the letter from the Commissioner of Pesháwar, dated July 9th, 1888, and enclosures from the Nawáb of Amb, I am to say that Sir James Lyall considers that Colonel Waterfield was right in telling the Nawáb that the occurrence of the 18th of June was no reason for stopping his endeavours to persuade the Hasanzaís to dissociate themselves from Háshim Ali Khan's policy, and compel him to surrender his captives through them as a preliminary to their coming in to the Deputy Commissioner of Hazára. But at the same time His Honour thinks that it was natural that the Nawáb should apprehend that the occurrence of the 18th of June might be considered by the Government to have altered the situation and to require a change of policy, and his action therefore in not carrying on his negotiations

pending further orders was, the Lieutenant-Governor considers, natural and perhaps prudent.

P.S. Since this letter was written the three letters, marginally noted, have also been received from the Commissioner of Pesháwar, and copies are forwarded herewith. Their contents have been in some respects anticipated, and do not seem to require comment.

Dated 17th July and 18th July 1888.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated Abbott-abad, 6th July 1888.

IN continuation of this office, dated 26th May 1888, I have the honour to forward, in original, a letter, of the 4th June, from the Deputy Commissioner, Hazára, regarding the blockade now being enforced against certain Black Mountain tribes.

By the beginning of May the orders of Government had been duly communicated to the tribes concerned, and to the Nawáb of Amb. The Hassanzai sent an acknowledgment. The Parári Sayads, however, excuse themselves, and try to show that they were not responsible for the offences charged against them, explaining that they had been asked by certain British subjects to raid, in order that the release from arrest of Fazl Ali Khán, agent of the Khán of Agror, might be effected, but that they refused.

The Deputy Commissioner thinks that this statement is probably correct, it being in accordance with his information. He also is of opinion that the Parári Sayads, desire to effect a peaceable settlement with Government; indeed, he has had a letter from the leading Sayad offering to come in and pay any fine adjudged against him. This must be taken with some mistrust, but no doubt they will prefer a peaceable settlement to coercion.

2. As regards the Nawáb of Amb, Mr. Cunningham seems desirous that the Government should know that he holds a different opinion of the Nawáb, of his character, position, and his manner of working, from that which I have myself formed during a long term of years as Deputy Commissioner of Hazára, and then as Commissioner of this Division. I have often reported upon this Chief. There is no question about his personal bravery; there is a good deal of question as to his perfect loyalty. He is an uncivilized, uneducated, semi-independent Khán, absolutely unscrupulous, thinking only of himself. He no doubt possesses much wealth and a large amount of buried treasure, and he deals with the Hassanzai and other independent tribes just as he thinks may suit him best, and without any reference to the wishes of Government. His enmities, his wrong doings, his intrigues, would fill a volume; he was, or might have been, a dashing soldier; he lives a solitary life, fighting for his own hand, with his own views of policy and in many doubts as to the future. He is a dangerous man, with a straightforward, pleasant manner, a grand horseman, a good shot, devoted to sport, but now occasionally much crippled by hereditary gout and the results of youthful excess.

3. He came in by order to see me in Abbott-abad at the end of April, and we had several long interviews, and discussed the whole situation. I told him that no one could blockade the Hassanzai but himself, and that I looked to him to show the stuff he was made of, the strength of his influence with the Hassanzai, and how he could hold them tight and advise them, as no one else was able, to prevent if possible the necessity for a military expedition against them, provided the Government demands were absolutely complied with. He then told me how he had several strings to the bow of his intentions, and desired to carry out the wishes of Government; that he would, amongst other things, win over a large party amongst the Hassanzai, Madda Khel, and Akazai, and set up Ibrahím Khán, son of Firoz Khán, or Gholam Kadir, nephew of Firoz Khán, (both of whom are living under the Nawáb's protection in Tanáwal) in the place of Háshim Ali Khán, the Khán of the Isazai, three clans with whom we now have to deal; that he would willingly expend Rs. 5,000 on this if it were necessary, and that even if he could not upset Háshim Ali Khán and substitute another as Khán of the

Isazai in his place, yet that he could so shake the position of Háshim Ali Khán that it would bring him at once to reason; that it was merely a question of the expenditure of money, and he would gladly do this in Government interests. Another plan of his was to re-impose upon the whole Hassanzai, or, with Government permission, threaten to do so, the import duties on *zikát*, which he used formerly to exact at Darband and Amb from the Hassanzai or from any party in the tribe adverse to him; that he would put on a tax of from Re. 1 to Rs. 3 per mule. He said that if Government moved a military expedition against the Hassanzai, it would certainly be opposed generally by independent territory united in a "holy war." He left me, shaking me warmly by the hand and saying laughingly that he knew quite well that I had personally never trusted him; that I was leaving the Commissionership of the Peshawar Division; and that he was determined to show me by his immediate action on this occasion that my constant suspicions of his fidelity had been unfounded. Nothing could have been more satisfactory than the result of our interviews: the Nawáb entered into the whole matter with interest. He told me, amongst other things, that when both parties of the Hassanzai had been brought together and thrown into one by Major Ommanney, Deputy Commissioner Hazára, at Haripur (a year or two after my settlement with them in 1875), they had declared that it was impossible for them to be answerable or responsible to Government for their Chief, Háshim Ali Khán; but he added that they finally agreed that they would manage him either by persuasion or by force. He said that the blockade would cause him and his country of Tanáwal some loss; that he knew he would be watched, and he was much afraid of Government spies and their reports regarding him! I had thought of proposing to Government to supply the Nawáb with some 500 Enfield rifles as a loan for the protection of his long border running with that of the Hassanzai. I believed that this would make the Hassanzai suspect that the Nawáb was one with the Government, and that it would take away all excuse from the Nawáb as to his power to oppose them. I, however, deferred making this suggestion to Government. I must say I was rather surprised, and drew my own conclusions from the Nawáb not applying for assistance from Government in arms and ammunition, if not for the support of troops at Darband. I suppose the Nawáb knew that he was not very likely to come into collision with the Hassanzai, although they might be blockaded by Government.

4. The Nawáb left me about the 7th May, some two months ago, full of professions, and I have never heard from him or of him from that day to this. From the Deputy Commissioner's report, however, it appears that the Nawáb has brought about the seizure of some nine men who had run the blockade. This is a good beginning, but I know nothing more that he has done.

(N.B. This seizure was by the Nawáb's men during his absence at Abbott-abad, and without his knowledge, I suppose.)

5. The Deputy Commissioner has now, I believe, sent for him to enquire about his proceedings in the prosecution of the blockade. I forget whether it has ever been mentioned in this correspondence, but I have heard that, after the arrest of Turrabáz in Agror (the beginning of all this trouble), the leading Hassanzai, Maliks, including Jehandad, Najjun, Hamideh, and Jabbar, went to the Nawáb, and asked him whether they were to support Háshim Ali Khán, their Chief. The Nawáb would give them no direct answer, merely saying that he could not advise them in the matter. He did not forbid them; they then sided with their Chief. It will be seen that, after knowing the Nawáb of Amb intimately for 15 years or so, and managing him under many peculiar circumstances, I do not form the same estimate of his character that the present Deputy Commissioner, Hazára, Mr. Cunningham, does.

6. I do not think that the Hassanzai will interfere with the Indus wood trade. Why have they not done so before when the river runs through their territory? There must be some good reason for this abstention? I wish we had some reliable statistics of the value of the wood trade on the Indus. The Kaka Khel merchants—British subjects—and the Kohistanís,

who cut the timber, have been in pecuniary difficulties for several years. I suspect that the wood trade down the Cabul and Swat Rivers and that on the Jhelum from Kashmere has greatly reduced the trade of the Indus River.

7. The Deputy Commissioner has nothing further to report up to that date (the 4th June) on the subject of the blockade, and I suppose that nothing has happened since worthy of record. Indeed, the submission of this report has been delayed by me in the hopes of the Nawáb of Amb making some sign. In his 5th paragraph, the Deputy Commissioner, Hazára, goes on to note three other measures for consideration in connection with the blockade:—

I. The inclusion of the Hindustani Colony in the blockade is perhaps of no great importance, but the matter is now being taken up in communication with the Brigadier-General commanding the Punjab Frontier Force; probably they ought to be and will be included.

II. As to the turning out of British territory and from the slopes of the Black Mountain any Hassanzai or Akazai tenants of the Khán of Agror, or other cultivator of lands who may have been in occupation for a long period of years, I can scarcely say from the proposals of the Deputy Commissioner whether there would be any advantage in such a measure, or the reverse. It would perhaps weaken and leave more open to attack some of the villages on the Black Mountain. I am not inclined to advocate any measure which may disturb the Agror border until we know what the Government intentions are. I have not heard of these resident Hassanzai and Akazai misbehaving in British territory; but if strong measures are to be taken by Government against the Black Mountain tribes, I think it might be advisable to carry out the proposal of the Deputy Commissioner, and to turn out these persons until a complete settlement has been effected.

III. As regards the removal from Agror of the family and relatives of Fazl Ali Khán, the agent of the Khán, this awaits the orders of Government upon correspondence now before them. Fazl Ali may perhaps have to be examined again; but if the Deputy Commissioner finds that the intrigues of Fazl Ali's relatives hamper him, then deportation would seem advisable.

8. As regards Akbar Khán of Gidarpur, the Deputy Commissioner will no doubt submit a separate report if the evidence against him is sufficient for him to act upon.

9. With reference to the Deputy Commissioner's observations on my remarks in paragraph 7 of my No. 75 C. of the 10th March, on the evidence which may be hereafter given by Ram Dass, a local carriage contractor, against the Khán of Agror, of what he overheard of a conversation between the Khán and his servant, whilst I naturally regret that anything I may have written should have given offence, yet I disagree with the Deputy Commissioner that my remarks could imply what the Deputy Commissioner fears they might—either that he was prejudiced or not likely to be careful in the acceptance of evidence. Indeed, I advised that the Deputy Commissioner was justified in trusting somewhat this witness; but a point that any Judicial Officer of experience would be certain to consider, is how came this witness to volunteer to give information, and go for this purpose to the Serishtadár of the Deputy Commissioner? What interest had he in the Deputy Inspector of Police, Rahmat-ullah Khán, or his safety? Witnesses do not usually volunteer to give disinterested evidence without some object of their own. Whoever hears this evidence judicially will certainly consider these things. No one appreciates more than I do the difficulties which beset the Deputy Commissioner in dealing with the case of the Khán of Agror and of others suspected of disloyal and traitorous intrigues, but it is my duty to show Government what I believe to be weak points in the story, and not to pass them over in support of the prosecution. This should not, and is not likely to, deter the Deputy Commissioner in working out his view. He has already secured sufficient information to satisfy himself, and to throw very strong suspicions upon the accused. He could scarcely have hoped that he would have been able to prove more.

10. The alteration of the capital sentence passed upon the Khán's servant, Turrabáz, to transportation for life, will not have any unsatisfactory result. It will be thoroughly well understood along the border that the punishment of Háshim Ali Khán, the master, has yet to come.

11. The Deputy Commissioner has no doubt dealt with the case of Burhan Sháh and Amír Sháh, the Sayads of Mír Bandi, who are mentioned in the petition of Parári Sayads as having endeavoured to bring about a raid on Agror.

12. Since writing the above, a letter has been received in my office from the Nawáb of Amb, which can scarcely be thought satisfactory, and this will form the subject of another letter.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 4th June 1888.

IN reply to your No. 139 of 24th May (received 28th), stating that a further report is awaited "on the manner and extent of the blockade" against the Hassanzai and other tribes on the Agror border, I have the honour to refer you to my letter of 21st April, in which I reported fully on these points, and have nothing more to say or suggest as to the manner in which, or the extent of country over which, the blockade can be usefully enforced.

The following remarks therefore will be confined—

(1.) to an account of what has occurred since the blockade was imposed, and the orders announcing it made known to those concerned; and

(2.) to some observations on matters connected with the circumstances out of which the blockade has originated.

2. *First.* The orders of Government were communicated to the tribes concerned and to the Nawáb of Amb immediately on receipt of your No. 131 C. of 28th April, approving the drafts submitted with my letter above quoted. The Hassanzai sent a mere formal acknowledgment of the *parwánah;* the Sayads of Parári sent an answer endorsed on my *parwánah* which only reached me a few days ago. A copy and translation is annexed. You will observe that, while they deny all complicity with the raid on Bhágráin (July 1887) and all responsibility for the death of Núr Jamál, they distinctly allege that whatever troubles have occurred have been instigated from Agror itself, and declare that, recently, men from Agror have come to them with money to incite them to make a disturbance with the object of bringing about the release of Fazl Ali Khán. From my own information I know this to be the case, and have before this reported the fact. The present letter gives a striking corroboration of those reports. It appears probable that the party in Parári, which has hitherto acted under the instigation of Fazl Ali Khán, fear that his return to power is unlikely, and they are more ready to bring about a peaceable settlement than continue hostilities with Government. I have also received a separate letter from Miyán Said alone (the leading man of Parári), in which he offers to come in after the fast is over, and, if his defence is not accepted, to pay a fine, provided the fine is declared to be due from all in Parári, so that he may be able to enforce subscriptions from the other Sayads and families in these glens. It cannot be concluded from this that he will be in any hurry to pay up, but his letter shows that he is not anxious to drive matters to an extremity, and it seems to me to corroborate what I reported before, that a slight show of force would have sufficed to secure the submission of the Paráris.

The Akazai were not separately addressed, as they were already under blockade for older offences.

The Nawáb of Amb has only recently sent me a formal reply to the letter addressed to him; in it he promises to do all he can to co-operate. To strengthen his hands in what, if all the circumstances were known, would be admitted a difficult position for him, and also to keep as far as may be an independent watch on affairs, I have sent a Police officer in plain clothes to

Darband, as was done during the Akazai blockade of 1885 by Mr. Fryer with good results.

In his letter acknowledging my *murasila*, the Nawáb makes a remark which deserves consideration: that there are thousands of rupees worth of wood in transit on the river, the property of British subjects and of himself, in the power of the Hassanzai, and probably British merchants, Kaka Khel, and others, higher up the Indus in Kohistán engaged in the timber trade, on whom reprisals may be made.

This cannot now be helped, though it may give the Hassanzai, who command the river for a long stretch, more than they are likely to lose by the blockade; but the Kaká Khel will possibly not come to much harm, and timber caught or seized above Darband may be released by the river itself at the next floods.

The Nawáb's letter is of less importance, as I talked the whole subject over with him fully in the beginning of the month (May), and you yourself saw him and heard all he had to say.

What he said to me may be briefly stated: that he would do his utmost to make the blockade effectual, but that he did not think it would or could bring about the punishment of Háshim Ali Khán in a manner equal to what he supposed Government would desire.

He did not say, as he might perhaps have justly added, that the blockade would hit him harder than the Hassanzai, more especially than the Khán of Seri, whom it seems difficult to touch at all unless the Hassanzai themselves are driven to take action against him; and if the blockade were put on south of the Utmanzai settlements, that is, on the Pesháwar border, as suggested by you before, it would more seriously injure not only the Nawáb, but the Utmanzai, who have been doing good service.

If again the river route is closed to prevent the Hassanzai levying tolls on timber, the loss to the Nawáb and the injury to a thriving British trade would be out of all proportion greater than any harm this measure could inflict on the Hassanzai.

3. As some doubt has been expressed of the Nawáb's line of conduct, I venture to make the following remarks with reference to the observation in paragraph 5 of your letter No. 131 C., dated 28th April, that "he is not an object for much sympathy. His intercourse with the Hassanzai * * * has not borne the fruit it might have done had he always thought of Government interest," &c.

I am not aware of the grounds on which this is founded, and think that, having regard to the divisions among the Hassanzai, and to the fact that for two generations the Chiefs of this clan have been closely allied by marriage and interest to his special enemies, the Nawáb might fairly claim that the conduct of the bulk of this tribe for many years past is no small proof of his loyalty to Government in the management of his border.

The tribes on this frontier with whom the Nawáb has the closest relations are the Madda Khel and the Hassanzai; the former have practically never given trouble; of the clans on the immediate border of Agror, the Hassanzai have for the past 20 years not merely been the best behaved, but the only one which has not behaved ill.

Since the troubles of 1868 their conduct has been uniformly good, with the single exception, of course, of the practically distinct section of the Khán Khel, who are the hereditary allies of the Khán of Agror. The Nawáb can hardly be held responsible for their behaviour, and they are the only section of the Hassanzai who have given trouble.

Mr. Fryer, who was Deputy Commissioner of the district for some years, and had experience of the Nawáb's co-operation in the blockade against the Akazai and other tribes in 1885, specially commended him for the assistance given, and in a memorandum, which you have seen, recorded that though it was difficult to get the Nawáb to promise, yet what he had promised he had never failed to fulfil.

It appears to me that the entire absence of all trouble to us on the Tanáwal border, and the conduct towards us of those clans with whom the Nawáb's relations are closest, are the best possible proof how well he has fulfilled the responsibilities of his post and the duty so pointedly insisted on by Government in 1883 to "maintain the peace of the border."

He may be personally opposed to the Khán of Agror, but he is far too wise ever to have indulged in the idea suggested, and does not need to be told that, happen what may to the Khán, in no conceivable circumstances would he—a Tanaoli—be permitted to interfere in Agror.

He began life by coming with his levies to the assistance of Colonel Ommanney, the Deputy Commissioner, and a small detachment of Gurkhas, who were surrounded by many thousands of the Black Mountain clans, and at one time averted what might have been a serious attack by a charge with a few Tanaoli horsemen against a mass of the enemy who were rushing down hill. Both Colonel Ommanney and Colonel Sym, who now commands the regiment with which he was then present, still describe his conduct on this occasion as the "most gallant feat of arms they have ever seen."

On the whole, it appears to me the Nawáb is in a difficult position; to maintain himself in Amb, where he is independent and must stand or fall without assistance from us, he is compelled to cultivate alliances with the powerful tribes around, and can only exist by perpetual watchfulness and careful management of conflicting factions.

Whatever his difficulties may have been, no trouble arising on his border has been permitted to embroil British territory; all authorities I have ever heard or read have agreed that he has managed his border wisely, strongly, and with advantage to Government. He is now called on to blockade the whole Hassanzai, including his own allies, as a means to secure the punishment of the friends of his personal rival, the Khán of Agror; and though I would not for a moment suggest that Government is not fully justified in expecting his co-operation, yet, if the facts are fairly surveyed, his position may seem one of some difficulty not without claims on our sympathy.

4. Whether or not the history of the Nawáb, or the past good conduct of the Hassanzai, or Mr. Fryer's recorded opinion of the trust which can be placed in his promise, be considered in the Nawáb's favour, the firstfruits of the present blockade are assuredly due to him, and of them he must receive the credit.

On the 4th May the police from Kirkplián, acting on information supplied by the Nawáb's servants, arrested at Darband 11 men, of whom 3 are Akazai; 7 are believed to be Hassanzai; and 1, the principal man among them, Faiz Ali Sháh, is a Sayad of Palosai.

The Hassanzai immediately held a jirga, and sent men to Háshim Ali Khán, asking him to set free his two captives, and in return get the release of their clansmen. Háshim Ali, as usual, took counsel with the friends of Fazl Ali in Agror and Manserah, and advised the Hassanzai not to move further in the matter at present, but ignore the capture of their men.

They decided to do so, as a piece of bravado, and from a dislike of giving in. The relatives of the Akazai and of the Sayad above named similarly sent jirgas to Háshim Ali, who reminded the Akazai that they were under blockade for their own offences, and put the Sayad's friends off by refusing to do anything in the month of Ramzan.

The above brings down to date an account of affairs since the imposition of the blockade; it remains to notice a few subsidiary matters connected with its enforcement.

5. In my letter of 21st April, I suggested the advisability of the following measures:—

(1.) That the Hindustáni fanatics of Palosai, who are dependants of the Hassanzai, and had actively espoused the defence of Háshim Ali Khán, should be included in the blockade, and arrested if found in British territory.

(2.) That the necessity of removing the Hassanzai and Akazai living in Agror on the slopes of the Black Mountain, or in villages in the plain, be considered.

(3.) That the family of Fazl Ali Khán, his brothers and sons, be removed from Agror.

As to the first measure, the reasons for which have been more fully given elsewhere, it is perhaps not very important, as these men will only come to British territory (Hazára or Rawálpindi) to take up money remitted from

down country; their arrest, if chance made it possible, could do no harm; might work good; and it seems to me worth while to avail ourselves of every opportunity of bringing pressure on the Hassanzai. As to the second measure, I have before given a rough list of the numbers of Hassanzai, Akazai, and Bangash living at Agror as tenants or servants of the Khán; if the blockade should drag on without effect, as the blockade on the Akazai has done for the past four or five years, it appears to me we should have to turn all these men out, for it seems anomalous, if not absurd, to declare a stringent blockade against these clans and allow their surplus population to settle in Agror on the slopes, and at the foot of the Black Mountain, where they are useless for defence, and can only assist our enemies.

As to the third measure, I have already submitted full reports on the conduct both of Fazl Ali and of the Khán of Agror; till orders are passed on that, this point cannot perhaps be settled. But for the intrigues of the friends of Fazl Ali Khán, I make no doubt that the two Seri captives would have been restored ere this.

At one time the Khán's wife, in the interests of her brother (Háshim Ali Khán), at another Haibat Khán, with the idea of averting harm from his own brother (without his knowledge), sought to induce Háshim Ali to give them up. Each time Fazl Ali's friends interfered with urgent advice against this step, as likely to be the last rivet in the proof against Fazl Ali Khán. It is a mistake to suppose that Fazl Ali Khán stands alone, friendless, among many jealous enemies. A majority of the leading men in Konsh and Pakli are connected with him by marriage, by alliance and party interest, and work hard in his behalf.

The chief of these is Mahomad Akber Khán, Jagirdar of Gidarpur, the leading spirit of the faction which dominates Konsh, Pakli and the Manserah Tahsil.

Information which seems to me credible, and is supported by documentary evidence and depositions of witnesses, shews that not long ago a large sum of money was sent to Seri, partly for Háshim Ali Khán and partly for the Hindustánís of Palosai, by Akber Khán of Gidarpur, out of the hoard which Fazl Ali has collected in past years from his master's revenues, and possibly without his master's knowledge. After Fazl Ali's arrest, his money and valuables were sent for safe custody to the houses of his connections, Akber Khán, Jagirdar of Gidarpur, and Hamidulla Khán, headman of Baffa.

This matter may have to be reported separately; meanwhile it is certain that the intrigues of Fazl Ali's partisans do much to encourage the obstinacy of Háshim Ali Khán, and are one of the chief difficulties in making any blockade effectual.

I feel some reluctance to make this report, or to state fully what my information leads me to believe, because, in forwarding to Government my letter, of the 5th March, and the accompanying deposition of Ram Dass about a conversation of the Khán of Agror which he overheard, in paragraph 7 of yours of the 10th March, while admitting that the evidence did not "look at all like invention," you remarked that the only reason for doubting it was that Ram Dass (a local carriage contractor, and not an official subordinate to me) had "to secure his own position with the District Officer by whom he is threatened with dismissal."

When it is suggested as a reasonable ground for a man's action, that he is giving false evidence in order to please the Deputy Commissioner, it seems to be implied that the Deputy Commissioner is not only violently prejudiced, but is popularly supposed to be ready to except perjury as meritorious service condoning other defects.

In the face of such remarks, formally recorded and unwithdrawn, I am respectfully constrained to say that it is with great reluctance that I report either my opinions or the evidence on which they are founded.

If I have to report on matters which in their nature are not susceptible of such proof as propositions in abstract science, I hope at least to be credited with impartiality and with the sole desire of laying the facts, such as they are known to me honestly, before Government.

6. For reasons fully explained before, it is generally believed to be difficult to reach the Hassanzai by a blockade in such a way as to compel them to force their Chief's submission. One other measure subsidiary to the

blockade would perhaps induce them to think of the wisdom of giving in. Up to 1880, as you are probably aware, the Nawáb of Amb levied certain dues or tolls on the so-called Kishar Dalla Hassanzai, including among them the men of Seri. For various reasons, but chiefly with a view to conciliate them, he was made to cease levying these tolls, and the Government generously charged itself with the cost of compensation, for which, with your letter of 3rd August 1880, sanction was received to an annual payment of Rs. 300 to the Nawáb of Amb, practically a gift by Government to the Kishar Dalla Hassanzai. The Nawáb himself has not mentioned the matter to me, and it is not suggested in his interest; but as the Hassanzai disliked paying these tolls (*zikát*), I believe it would tend to make them more inclined to submit if the threat were held out, that if they do not speedily (say within six months) settle the matter, the Nawáb will be allowed to take tolls again hereafter. Of course, while the blockade exists, there will be no tolls, and if they are levied again, Government would cease to pay compensation to the Nawáb, thereby saving Rs. 300 per annum.

7. With regard to the question of treatment of Turrabáz, now under sentence of death, mentioned in the last paragraph of your letter to me, No. 131 C. of 28th April, it does not appear that either at that time or till the present there has been such delay as is ordinarily understood to entitle a prisoner to mercy.

He was tried in January, sentenced in February, his appeal was heard in the usual course in the Chief Court, and rejected in April; and had he been an ordinary culprit, the sentence would probably not have been carried out till May or till now.

A similar appeal from a prisoner tried at the same sessions is still pending before the Chief Court, and if dismissed the law will, I presume, take its course. In the case of Turrabáz there is this difficulty to be faced, that if it be supposed, within or without our border, that the intervention of his friends by raids and murders in British territory has procured for him any remission of sentence, the same procedure will of course be adopted whenever another murderer from one of the clans beyond our border is arrested and put on his trial in British territory.

On the other hand, it is very unlikely that Háshim Ali Khán—happen what may to Turrabáz—will take the lives of the Mullah and the boy whom he at present holds captive in Seri. They had nothing to do with the arrest of Turrabáz, and public feeling would prevent him as a Mahomedan from touching them.

TRANSLATION of a PETITION from MAHOMED ALI SHAH, of Bilandkot, GHAZI SHAH of Saidera, and MIYÁN SAID of Garhi.

[Endorsed on the back of the Deputy Commissioner's *parwána*, dated 1st May, announcing the blockade against them, issued on receipt of Commissioner's letter, No. 131 C. of 28th April 1888.]

WE have received this order and write in reply that the men of Tikri committed the raid on Agror last year.* A few men of Abdulla Khán were with them. We did not know of it, nor can we pretend to fight Government. Núr Jamál of Ghaniyán was killed by unknown thieves; it is not fair to make us responsible.

* *i.e.*, on Bhágrián.

3rd. Gul Hasan and Fazldin were imprisoned in Bilandkot; we did not hear of it from Government nor from Bilandkot;* some bad characters seized them, robbed them of their pugris and shoes, and let them go. We are not responsible.

† Mahomed Ali Shah, one of the writers, is the head man of Bilandkot.

Moreover, whatever trouble and disturbance occurs, it all springs from Government territory; for instance, Burhan Shah and Amir Shah, Sayads of Mir Bandi, Agror, twice came to us with Rs. 300, and asked us to raid on Agror, saying perhaps Fazl Ali Khán would be released, but we, knowing we could not oppose Government, answered that if Government without enquiries

is ready to impose a fine, and if it determines to punish us, we shall scarcely escape. This is the truth. For the rest Government may blockade us or not as it pleases.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 9th July 1888.

I HAVE the honour to forward, for the information of His Honour the Lieutenant-Governor, a translation of a letter bearing the date of the 22nd June, received on the 1st July, from the Nawáb of Amb to my address, saying that he has suspended his negotiations with, or his advising of, the Hassanzai and other Black Mountain tribes, owing to the occurrences of the 18th June on the Black Mountain.

I also forward a copy of my reply of this date to the Nawáb of Amb, which I trust will meet with the approval of His Honour.

I have sent copies of both to the Deputy Commissioner, and asked him for any remarks that he may have to make. A copy of my letter to the Deputy Commissioner, Hazára, accompanies this.

TRANSLATION of a LETTER, dated 22nd June 1888, received through the post from HARIPUR in Commissioner's Office, on the evening of the 1st July 1888, from NAWÁB MOHAMED AKRAM KHÁN, C.S.I., Nawáb of Amb, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division.

WHEN I had the honour of visiting you at Abbott-abad you gave me instructions regarding Independent territory. On my return to Amb, after consulting with you about the trans-border, I found that orders had preceded me and had reached Darband for the blockade and seizure of the Hassanzai. Moreover, some Hassanzai had been arrested. For these reasons I postponed my proceedings for some days, but after a few days, in accordance with your instructions, I commenced communications with the Hassanzai. I saw and heard them, and consulted with them; but the month of Ramzan was about to set in, and, as on account of that and the heat of the weather, the coming and going of their representatives was difficult, the Hassanzai held the proceedings in abeyance for the month of Ramzan. By the grace of God and the good fortune attending the British Government, and in accordance with your views, they made firm promises that after the Id, if the matter could be settled with the approval of Háshim Ali Khán, it would be better; otherwise they would themselves act agreeably to the wishes of the British Government. After the termination of the Id I sent messengers to the Hassanzai to call their attention to their promise, but in the meantime fresh disturbances took place in Agror, and therefore this work has been suspended for the present. If these fresh disturbances had not broken out in Agror, then, by my endeavours and management and the good fortune of the British Government, the views and wishes of the British Government would have been realized.

I beg to state that at present all former proceedings have, on account of fresh breach of the peace in Agror, been set aside or suspended. I will act now as you may direct. Shall I continue my efforts to arrange matters as I have been doing hitherto, or shall I defer further action?

TRANSLATION of a LETTER, dated 9th July 1888, from COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the NAWÁB of AMB.

I HAVE received only on the 1st July your letter of the 22nd June. It is now two months since you left me at Abbott-abad to undertake the blockade of the Hassanzai and other Black Mountain tribes, and you were then full of hope that by your undoubted influence with the tribe, and by the long experience that you have of their management, you would be able to bring about a submission of the tribes to the just demands of Government, and more especially, in the first instance, to effect the release of men kidnapped from British territory by Háshim Ali Khán.

I can quite understand that the month of the Ramzan was not favourable to their negotiations. That month has now long passed, and the Hassanzai have, as you state, shown under your advice a disposal to meet the demands of the British Government, and use their undoubted influence with Háshim Ali Khán, the Chief of their own election, to make him realize his position and the trouble that he is bringing upon the tribes whom he is supposed to lead and guide.

I do not clearly understand what occurred in Agror on the 18th June, and the attack upon our troops within British territory by Akazai Gújars, and the latter having been supported by Háshim Ali Khán descending the Barchar spur within British territory and coming into collision with the villagers of Jaskot, whose lives were lost, have caused any suspension or deferring of the work entrusted to you.

Háshim Ali Khán has again shewn that he does not hesitate to attack British subjects in British territory, and thus to still further embroil the tribes, of which he is supposed to be the leader, with the British Government. I think that these very occurrences should make you redouble your endeavours to bring the Hassanzai and other Black Mountain tribes to a sense of their position of the impropriety of their attitude towards the British Government, and of the certainty that the British Government will hold them answerable.

The occurrences of the 18th June seem to me to further strengthen your hands and arguments, and the measures which you are advocating, The Government have now still greater cause of complaint against the Black Mountain tribes, and the Akazai have added heavily to the account which Government has against them.

You should earnestly prosecute your endeavours to bring the Black Mountain tribes to reason, and advise them, by the giving up of their prisoners and the expression of their regret, to place themselves in a position in which they can be received by the Deputy Commissioner, can offer the explanation of the tribe, and hear from him what Government has to say regarding their conduct and that of their Chief.

You write most hopefully of the probable result of your influence, and I cannot but think that the tribes will endeavour through you to bring about a settlement with Government and avoid other punishment. I shall hope to hear again from you very soon.

COPY of a LETTER, dated 9th July 1888, from COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára.

I FORWARD a translation of a letter which I have received from the Nawáb of Amb, dated the 22nd June, and of my reply of this date to the Nawáb.

The Nawáb's letter of the 22nd June was posted in Haripur on the 1st July, and reached my office that evening.

I do not understand the delay between the 22nd June and the 1st July, or why the letter was not posted close to Amb at Kirpliyán. I think the Nawáb was with you in Agror on the 27th June, and the suspicion crosses my mind that he may have taken the letter with him and have given it to Rahmattulla Khán, Deputy Inspector of Police, in Agror, to send down to his home in Haripur to post there on the 1st July.

I shall be glad to receive any remarks of yours upon the subject, and your view of the attitude of the Nawáb and of his excuse that he suspended his negotiations.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to the GOVERNMENT of PUNJAB, dated 12th July 1888.

IN my No. 3115 of the 21st of June I gave an anticipation of what would be reported by the Military Court of Enquiry on account of the occurrences of the 18th of June on the Black Mountain. My letter will be found to give all essential facts correctly. In it I also anticipated that no raid by the

independent tribes upon British territory would follow, and that the valley and border would quiet down. It has so happened. I also reported that I had directed the Deputy Commissioner to communicate with the independent tribes concerned in this attack on British troops in British territory and to demand an explanation from them. I am awaiting their reply.

Under cover of my docket of the 23rd of June I forwarded a copy of my 3139 of the 23rd of June to the Deputy Commissioner, Hazára (then in the Agror Valley), directing him to submit a brief report on these occurrences, to ascertain who the assailants were, whether Major Battye fell into an ambuscade, how our villages behaved, why the armed retainers of the Khán were not forward in engaging with the enemy, to enquire particularly into the conduct of Deputy Inspector Police Rahmatulla Khán, to call upon the tribes for an explanation of their conduct, and to endeavour through the Sayads of Chor Kalan and other trustworthy persons to recover the property and arms of our officers and men who fell on the 18th of June.

My No. 3290, dated 2nd July, has communicated to Government a petition supposed to be from the Akazai, and professing to give some explanation of the action of their Gújar tenants who are alone supposed to have been the assailants on Major Battye and his party. This communication has been forwarded to the Deputy Commissioner, Hazára, for report.

My telegram, dated 5th instant, has reported that the collections of the independent tribes have disappeared from the Black Mountain, and that it is proposed to reduce at once the garrison at the Uggi Post to one hundred men, the valley of Agror and its border being again at peace and unthreatened by any danger.

2. I have now the honour to forward in original Deputy Commissioner Hazára's report of the 5th of July.

In submitting this to Government I must make a few remarks. We find that the enemy which attacked our troops were Gújars, graziers, and the tenantry of Akazai. These are so much a part and parcel of the tribe itself that the Akazai must be held responsible for their conduct, and they will not protest against this. The troops advancing from the crest of the hill at Bamphur Gulli which may be held to be the boundary line between British and Independent territory were fired at before they reached the Independent Gújar hamlet through which they passed. The Deputy Commissioner reports that neither men nor women were in the village, and that orders had been given that the property in the houses should not be touched. I myself am inclined again to draw the conclusion that there was no ambuscade and no preparation, and that the Gújar hamlets were almost surprised. It must be remembered that the Akazai have been long under blockade as avowed enemies of Government, that the Hasanzai and Pharári Sayads are similarly situated, and that our troops or police have never been upon the ground they were then reconnoitring, save with hostile intentions towards Independent territory. It is not a matter for surprise that their rear-guard was on this occasion attacked by the class of men with whom they came in contact, and who apparently were not led by any responsible Akazai. Of course the affray brought out every one within reach of the sound of the firing.

It is to be noted that the Deputy Commissioner has evidence that the excuses put forward by the Akazai and their blaming of the Police for interference with their houses and property were inspired from British territory.

3. With reference to the Deputy Commissioner's remarks that the Standing Orders for the Uggi outpost are expressly said to be for guidance *when the fort is in command of a Native Officer*. I think it will be found (if any enquiry be thought necessary) that this *heading* was only introduced a month or two ago when these Standing Orders were redrafted or re-arranged by the order of Brigadier-General commanding at my suggesion after my visit to Agror in April. There was, I believe, a different heading to the previous orders, and Deputy Inspector Rahmatulla Khán has been stationed in Uggi for many years and was conversant with them. I would not censure Deputy Inspector Rahmatulla Khán, but in dealing with Major Battye, who for equal temper and kindliness was notorious, he might well have declined to

accompany the troops upon this expedition without receiving a *written order* to do so from Major Battye. I think in his position he might have done this, though I scarcely blame him for the omission.

No blame appears to attach to Rahmatulla Khán.

J. B. L.

As regards Haibat Khán, brother of the Khán of Agror, and acting for him as head of the family during the absence of the Khán from the Agror Valley under the orders of the Government, I take it that Haibat Khán is more there to look after the property and household of the Khán than to act for him as Chief and Jagirdar; for any such duties he is personally unfitted. As he was not informed of the movements of the troops, he was justified in not volunteering to accompany them, even if he knew of their departure (having regard to the suspicions attaching to his brother and his family). Major Battye would have sent him home again as he did the villagers of Beliyám. Jamadár Amarudin on duty with the Khán's levies in the Simbalbút tower on a separate spur of the Black Mountain might be called upon to explain why he did not help with his 10 men the Jaskot villagers. I am not inclined to attach much blame to him on that account until I hear his reasons. Of the story that two servants of the Khán on the evening of the 17th were sent from Agror to warm Háshim Ali Khán of the reconnaissance of the Gurkhas to be made on the 18th. I will only remark that if such was the case, why did not Háshim Ali Khán of Seri attack the troops before or upon their reaching the crest of the mountain at 11 a.m. ?

I agree generally with Commissioner as regards Haibat Khán.

J. B. L.

Speaking with reservation in regard to the information that the Deputy Commissioner may have before him, I cannot think that any warning reached Hasanzai or Akazai to prepare them to oppose the troops. If two of the Khán of Agror's men were with the Gújars, why did they not collect more assailants than the few who attacked the rear-guard.

Throughout this report it will be seen that the villages of Agror did fairly well; some accompanied our troops; some came up the mountain to assist in their retirement. The men of Jaskot drove the Hasanzai enemy off the hill, and the Sayads of Chor Kalan recovered bodies of the dead.

4. Any information alluded to in paragraph 5 of the Deputy Commissioner's letter of the intrigues of the absentee Khán of Agror and of his partisans will no doubt be considered hereafter in dealing with those persons. The Khán of Agror would have felt himself altogether justified and to have been acting in accordance with the wishes of the Government in employing in Agror and in finding occupation for members of independent tribes. The villages on the Black Mountain could only be cultivated in safety by them and by Seri Khors whose individual persons and properties independent tribes would respect. The Khán is in no way to blame for this existing condition of things in Agror. He has succeeded to it from his father, and no attempt has ever been made by the Government officials to introduce a different system; indeed, if worked by an honest Khán, this has distinct advantages. The border villages on the Black Mountain cannot yet be treated like those in the interior of Hazára; they have always been managed with much less interference, and they still require to be so, exactly like the villages on the Kohat border, until the neighbouring independent tribes are gradually tamed by judicious personal management or made by force to respect Agror more than their ancestors have done. The military expedition of 14,000 men on to the Black Mountain in 1868 has left nothing behind it in the minds of those whom it was sent to coerce, than a recollection of its futility. We are still reaping the fruits thereof. Border management during the subsequent 20 years, although occasionally weak, slow or uncertain in the hands of succeeding Deputy Commissioners, and no doubt perhaps lost sight of by the Commissioner, has nevertheless done more to improve our relations with the tribes, and to restrain them, than the military expedition above alluded to. In 1875 it was approved and accepted by the Government that the District Officer should keep up a personal knowledge of

(*Vide* Telegram 196, dated 23rd July.)

This is not saying much: if all military expeditions must be as futile as that was there should certainly be no more of them.

the tribes and of their headmen. They were to have been seen once or twice a year, and were to have been encouraged to come into intercourse with our officials. This system has not, I consider, been given a fair chance, has scarcely been tried, and now when we want to deal with Hasanzai we have to look to the Nawáb or the Khán, and have not our own party in the tribe to assist us. Whilst the tribes are personally dealt with by our officers, Nawábs and Kháns, and such like intermediaries, whose hereditary relations with tribes cannot be ignored, have to be watched and held and guided and worked into the system. If left to themselves they are led away by their personal feelings and their relationships, by their ignorance, or by some false ideas of self-preservation, or the maintaining of their own influence, or even from disloyal tendencies, and they neglect the Government policy. But these Nawábs and Kháns cannot be swept away, and they must be utilized, and in time of difficulties they may be of distinct value in managing their own people and their borders. They are the natural leaders of the people.

Háshim Ali did not give the Deputy Commissioner much chance; he began to raid on our territory as soon as he became Chief.
J. B. L.

The Khán of Agror has not been neglected or left to himself.
J. B. L.

Very true; but if a Khán persists in working against us, he must be coerced in some way.
J. B. L.

5. To return to the Deputy Commissioner's letter, I think Mr. Cunningham has showed a wise discretion in not as yet disarming the Khán's retainers, before a body of Border Militia could be substituted for them. This question remains under consideration and report. As regards the conduct of the Black Mountain tribes since the occurrences of the 18th, and alluded to in paragraph 6 of the Deputy Commissioner's letter, it may be concluded, with a fair amount of certainty, that they are for acting entirely on the defensive. Every plan will have been discussed in Jirga, and these wiser counsels have apparently prevailed. The tribes seem to have greatly changed from what they were 15 or 20 years ago; perhaps they doubt if they will find allies, or there is now a peace party amongst them.

I accept this view for the present; but, as the Deputy Commissioner says, the question will have to be dealt with in some final way shortly.
J. B. L.

The rifles in the hands of our troops and of the villagers may also make them less ready to raid than formerly.
J. B. L.

6. It is satisfactory to hear the Deputy Commissioner's favourable opinion of the Nawáb of Amb and of the assistance already given by him. I believe myself that the Nawáb will be looked to by the Black Mountain tribes to settle their difficulties with Government. I believe his influence with them increases in proportion to the extent of their difficulties, and I suspect that in the interests of the Black Mountain tribes and to secure the recognition of his services by Government, he will slowly (as if with difficulty) bring about the understanding that is desired and a compliance with the reasonable demands of Government. I have said before that the detachment of the Hindustáni fanatics have returned to their homes on the right bank of the Indus, and that no border disturbance threatens us from the Black Mountain. I think the Nawáb of Amb will effect the release of the two British subjects kidnapped by Háshim Ali Khán. In a recent letter to me, which has been forwarded to Government, the Nawáb leads us to conclude that the persons seized in Tanawal on the proclaiming of the blockade by his people, were so arrested during his absence, before he was aware of the orders for the blockade having been promulgated, and without his instructions. Still his officials and servants have in this matter done well, and the Nawáb may be complimented.

7. I agree with the Deputy Commissioner that the occurrences of the 18th do not alter the situation of affairs between Government and the Hasanzai, but the Hasanzai will recognize that their Chief has made another move which will tend to embroil them still further with the Government. Hasanzai and Akazai must be dealt with apart.

When Colonel Molloy lately ascended the spur above Simbalbút he did not go to the crest of the mountain or on to its watershed, and his detachment of troops were preceded and guided by the Khán's retainers holding the Simbalbút tower, who volunteered for this service, and he was much pleased

with their work; this should not be lost sight of. Had our villagers sent word on to the independent tribes, probably the rear would have been attacked on their retirement, but our villagers apparently did not on that occasion act as spies against us, which is constantly, and perhaps not always with justice suspected.

8. As regards the insecurity of the upper slopes of the Black Mountain along the Agror border I may point out that much of the frontier of the Kohat District is, and always has been, exactly of a similar description and more insecure than Agror, partaking rather of the condition of what might perhaps be called neutral ground. The border of Pesháwar is more civilised and safe, but still in some parts also insecure. The relations of some Peshawar villages with their independent neighbours are often intimate, and when grass fails in British territory all the cattle cross the border and graze unmolested in Independent territory.

9. With regard to the recent arrest of all Akazai found in Agror, mentioned in paragraph 7 of the Deputy Commissioner's report, it has always been a well-known and understood thing that immigrant Akazais and Hasanzaís are tenants of the Khán of Agror and of other proprietors; and this has never been prohibited, more probably it has been encouraged. When the blockades of Akazai and Hasanzai were ordered, neither the Khán of Agror nor the Nawáb of Amb were directed to turn out or to seize these foreigners. As it so happens that they have now been arrested, it may, I think, for the time being, be permitted; perhaps there may be some satisfactory result, and if there is none, it is as well that we should at once know that this measure is ineffectual. But it will perhaps be difficult to sweep the Agror Valley clear of members of independent tribes who have been long resident there and to expel those who sympathise with them. It is however an experiment that might be tried with caution. The number of the Akazai arrested has not been stated.

10. The Deputy Commissioner alludes again to the debarring from British territory some years ago of the Akazaís and of Háshim Ali Khán. I need scarcely point out again how these measures differ from the blockade now ordered against the Hasanzai and the combined Black Mountain tribes, and what better chance of satisfactory results we now have, provided only that the Nawáb of Amb will do his duty. I would put the advice given by the Deputy Commissioner in the last clause of his letter in a different way, and say that Government had better deal directly with the certain facts of offences committed in British territory by independent tribes and their leaders, because we and the whole public are absolutely sure of their guilt. With regard to traitors within our territory, we should leave no stone unturned to secure proofs of their disloyalty, and treat them unsparingly, or with calculating moderation in accordance with what may be accepted as sufficiently proved against them, and with regard to the possibility of their either being utilized again or of efficient substitutes being found for them if they must be removed.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT of the Pesháwar Division, dated 30th June 1888.

MY telegrams of 19th and 20th instant gave the few facts then known regarding the attack made on the 18th instant by Akazai Gújars on the Black Mountain on a party of Gurkhas under command of Major Battye; and I have now the honour to submit a further report on the circumstances connected with this affair, in which 2 British officers and 4 Gurkhas were killed.

On my arrival in Agror I found that a Committee of Military officers was making an enquiry into the events of that day; their report, with the evidence of the witnesses examined, is probably already before Government, and it is unnecessary for me to repeat the story in detail. For convenience sake a brief account will be useful here. Major Battye commanding the 1-5 Gurkhas came out to Oghi on the 16th to inspect the detachment of his men in the fort; with him was Captaim Urmston. On the afternoon of the 17th he called up the Subadár Kishen Bir and Rahmatulla Khán, Deputy

Inspector of Police, told them he was going to take the troops for a route march up the Black Mountain next day, and directed the Police Officer to accompany him with some of his men. Major Battye then said he would go up by Sambalbút and return by the Barchar spur. Rahmatulla Khán endeavoured to dissuade him, but was told there were enquiries to be made as to water-supply at the top. Next morning at 5 o'clock Major Battye and Captain Urmston, with the Deputy Inspector, the troops, and Police, marginally noted, started from Oghi Fort. On reaching the foot of the hill, Major Battye said he would go up Barchar, not by Sambalbút. From Dewál, at the foot of the hill and further on the road from Belián below Barchar, the Deputy Inspector took some villagers. Major Battye objected to their accompanying them, but finally allowed them to follow. They went up past the (empty) village of Barchar, halted to examine a water spring and again for breakfast, and finally reached the crest at the place known as Bamphor Gulli about 10 a.m. Major Battye then said he should go along the top of the range past Chitabút and come down by Kungali into the north of the Agror Plain. The Police Officer asked the Subadár to beg him to return—and it is clearly proved by the evidence of the Subadár, as well as by the Thánadár's statement, that he pointed out this route must lead to a collision, as there were settlements of Gújars belonging to the Akazai on the hill at the point called Yag ká Chapra, between them and Chitabut.

1 Subadár.
1 Havildár.
3 Naicks.
2 Buglers.
53 Sepoys.
1 Mounted Constable.
17 Constables.

Major Battye, however, replied that he was not going beyond British territory, nor was he going to harm any one. They then marched on towards Chitabut. The Black Mountain rises here to a height of about 9,000 feet and some 5,000 above the Oghi Valley; near the summit it is thickly clothed with dense pine forest (palúdar). As the troops made their way along a narrow track this side of and below the crest, they were attacked by an enemy above firing and rolling down stones on them. The Thánadár again advised retirement, but Major Battye said he would not notice the acts and impertinence of some thieves, and should continue. The column then passed the dhárás or settlements of Gújars at the Chapra (Da yag Chapra or Yag ká Chapra) from which the men and women had cleared out. Major Battye expressly forbade anything in the grazier's camp being touched, and passed on without having made any reply to the enemy's fire, ordering his men not to open their ammunition.

Further on the path runs on the eastern face of Chitabut below the peak, where the hill, though more clear of forest, is covered with vast boulders and rocks, and the spurs fall away steeply towards Atir and Chorkalan, British hamlets. Before they were out of the forest, at some point evidently chosen by the enemy beforehand, they were again attacked. A Havildár in the rear was shot—the 2 British officers went back to see to him—Major Battye directing the main column to continue its march to a certain point where he would join them with the wounded man. He and Captain Urmston, with a few Gurkha sepoys, became separated from the main column, and were soon surrounded by the enemy. The Subadár, Kishen Bir, states he heard the bugler call out that the Sahib was wounded, on which he ran back to where Battye, with a chivalry which the enemy could not understand, was merely parrying the sword cuts of his assailant, and telling him they had not come to fight or injure any one. The Subadár ran this man through, seeing that Major Battye would not take his life. Soon after Major Battye became faint from loss of blood and fell; Captain Urmston was wounded, the few Gurkhas with them made a ring round their bodies till in a final rush the enemy broke through; when, finding their officers killed, the Subadár called to 2 others to save their lives, on which they leaped down the khud and got away, the 2 sepoys unhurt—the Subadár with a bruised thigh and a wound on his neck. Meanwhile the main body of the company and the Police had reached Atir, where the Subadár found them. He states he led them up the hill for some way, and the Sayads of Chorkalan were then sent on to recover the bodies of the dead. They brought back the bodies of the British officers that day, and the bodies of the Ghurkhas were recovered a couple of days later.

This account is mainly taken from the story given by the Subadár and the 2 Gurkha sepoys who escaped from the rear-guard; it tallies fairly with the statement of the Deputy Inspector of Police. There are some points in it which seem to me difficult to explain, and I doubt whether the whole truth will ever now be known.

According to accounts from beyond the border, the British officers stood back to back refusing to move, and the few Gurkhas there died where they stood with them. Of the main body, who with the Police went on to Atir, no one was hurt; and as they fired only a very few rounds per man, they were apparently not attacked in any force. The firing and probably messengers from the Gújars and others at the top of the hill brought out men from more distant villages—Sayads and Chigharzai from Kopra and Saidara (Pharián); Akazai from Bíran, Ledh, and Kan. The Pariárís came to Manna-ka-Danna and fired at long ranges at our men retiring down the Chorkalan spur. Meanwhile, however, villagers from Belián, Dilbosi, Bhágrián had come up towards Chorkalan to assist the troops, though from this point aid was of course not wanted. Further south Háshim Ali Khán, with a band of some 60 men, came by the Bamphor Gulli to cut off the retreat of the troops if they should move that way and come down the Barchar spur. The Jaskot villagers, led by Khán-i-Alam Malik, the only men in Agror whose behaviour was really loyal, zealous and worthy of praise, turned out about 40 rifles, went up Barchar, attacked Háshim Ali Khán, and drove him back with loss of 2 killed, one being a nephew of Háshim Ali. On their side they lost 1 man. The levies of the Khán of Agror were conspicuous only by their absence. The Jamadár in command at the tower on the Sambalbút spur states he took 10 rifles by Chejri to Barchar. He appears to have stayed behind there, and would not join or assist the Jaskot villagers, who drove off Háshim Ali Khán unaided. His conduct will be referred to later on.

2. The band who attacked our troops were estimated by the Subadár at about 150; reports from beyond the border and statements of our villagers put them at about 100. They were all Gújars of the Chechri or Khattan sections and Ledhs belonging to the Akazai villages Lari, Zandlui, Dhári, Bíran, &c., and to the summer grazing camps at Chapra and Tarkanna on the crest of the Black Mountain which belong to Lari. The Gújars lost six killed, viz.,—

Mihraj, of Chapra, (Lari).
Salámdin, of Chapra.
Kamáldin, of Chapra.
Imámdin, of Zandlui.
Ahmad Ali, Ledh of Lari.

The sixth, Jámdín, was, it is almost certain, a resident of British territory, a tenant and dependant of the Sayads of Chorkalan; but to prevent any suspicion of the treachery or complicity of any of our subjects, he was buried with the others beyond the border. Though these Gújars and Ledhs are not Akazai by race or blood, no practical distinction can be drawn between them and the clan of which they are dependants. They are settled permanently among the Akazai, and, in accordance with the usual custom, they pay the clan that owns the lands a yearly rent or tribute, and are bound to join them when the tribe assembles for a raid or for offence or defence. Many of these Pathán clans have among them small settlements of these inferior or dependant races, like Gújars, as tenants and cultivators, and they are usually found on the boundary of the territory of the superior clan, where they hold land on a sort of feudal tenure, and act as a buffer against possible enemies. A mutual tie of protection and service unites them, and the main clan, with its dependants, must for all practical purposes be looked on as one community.

On this border the Gújars, though politically weak from dispersion and want of union, are individually as good fighters and as turbulent as their masters, and in proportion to their numbers furnish more bandits and murderers than the Patháns themselves.

The Akazai have thus to answer for this attack on a body of troops within British territory; Háshim Ali Khán or the Hasanzai clan for his descent on

Barchar with an armed band of Khán Khel; and the Saiyids' and Chigharzai of Phariári for their conduct in collecting on the slopes this side of Manna-ka-Danna, and firing at our men when retiring down the Chorkalan spur.

In compliance with the orders in paragraph 5 of your letter No. 3139 of 23rd instant, I have sent *parwánas* to these three clans to explain their conduct. At the same time I feel bound to say that I should not attach much importance to their replies, which, if not insolent, are sure to be lying and hypocritical. These clans were at the time, and are now practically, at war with the British Government, and it would be unreasonable to suppose they would not be ready now, as before, to seize any opportunity of committing an outrage. The Akazai have been under blockade (ineffectual, indeed, as any blockade of this clan must be) for the past four years; Háshim Ali Khán and his immediate following for five years; and the Phariáries for some months past. Háshim Ali Khán has avowed openly in his letters that he is at war with us to compel us to surrender Turrabáz, the Hasánzai murderer arrested in November, and since sentenced to transportation for life. As a matter of fact, no peace has been made with him since his raid on Kulakka in 1883, when, with a band of 120 armed men, he cut up four British subjects because they were enemies of his friend, the Khán of Agror. He affects to forget or ignore that affair; but even if it be forgotten, his conduct since the arrest of Turrabáz is sufficient to indicate what his intentions are.

I should note here that evidence before me shows that after the event certain Kháns of our own territory, in sympathy with the Khán of Agror and with Háshim Ali Khán, sent a messenger to the Akazaís then collected on the hill, and advised them to throw the blame on the police and the villagers who accompanied Major Battye with a view to discredit the Deputy Inspector. They were to say that the attack was in self-defence, and was provoked by the police laying hands on the Gújar's fowls and milk. This is pure malicious invention: the troops were attacked, shots were fired at them, and stones rolled down on their heads before they came to the Gújars' camp. The truth is that at no time would troops or police be able to reach this point unobserved, and to march so close to this border without being attacked, and no offence on the part of our men (beyond that of their venturing to the top of the Black Mountain), was necessary to determine the clansmen or their Gújar subjects to attack them.

3. In your letter above quoted you directed me to enquire into the conduct of Rahmatulla Khán, Deputy Inspector of Police, whether he drew the attention of Major Battye to the Standing Orders in the Oghi Fort prohibiting troops advancing beyond certain points except for defence, and to the existence of bands of the Khán Khel on the top of the mountain in expectation of attack from Agror.

In the first place, there were then no such pickets on the crest of the range, and Háshim Ali, knowing there were only 80 or 90 men in the fort, could not have expected any attack.

They had pickets out on the hill in March and April, during the time the Oghi garrison was raised to 300 or 400 men; but when the extra troops were withdrawn, he too removed his watches and sent away the Hindustánís who had come to Seri to assist him. All the Black Mountain knew perfectly well, when April passed quietly, that there was no prospect of any troops being moved against them.

The Deputy Inspector states he was aware of the rules referred to, though they were not formally communicated to him. A copy is hung up in the quarter guard, not on the gate of the fort; but these rules are expressly said to be for guidance *when the fort is in command of a Native officer.** Major Battye was perfectly well aware of their purport. They were only recently drawn up by Colonel Molloy, under orders of the General; and Major Battye had discussed them with Colonel Molloy at the time. In any case the standing rules you refer to were drawn up for guidance of Native officers only; a separate letter of instructions for British officers remained with the officer in command, and was made over in succession from one to another; and Lieutenant Boisragon, who preceded Major Battye, did so make over

* The orders begin thus:—
"The following Standing Orders for the Oghi outpost, whenever it may be under the command of a Native officer, are issued with the approval of Brigadier-General J. W. McQueen, C.B., &c."

these instructions to him. It does not appear that it was the duty of the Police officer to argue on rules which are expressly limited to the case of the fort being in charge of a Native officer. Major Battye was not only a European officer, but commanded the regiment. He told the policeman he had to examine the water-supply on the top of the hill, and ordered the police to accompany him.

Moreover, Lieutenant-Colonel Molloy, who commands the other Gurkha Battalion at Abbott-abad, had not long before gone up to Tila, not far from the crest near the Kain Gali leading over to Seri. Rahmatulla Khán was practically ordered to go. He is an old man, nearly 60; has earned his full pension; and even if there were no Akazai or Hasanzai on the other side of the range, it is not likely he would be too ready to walk 6,000 feet up a mountain if he could avoid it; and knowing the risk, and being, as he is, a person specially obnoxious to the Hasanzai for his share in the capture of Turrabáz, I have no hesitation in saying he would have done all he could to stay where he was, and to dissuade any one from taking him up to Bamphor Gali. But there is a limit to the arguments which a person in his position can use to a British officer commanding a regiment.

He appears to have done all he could. On the evening of the 17th, he tried to dissuade Major Battye with the length of the march as then contemplated; next day, before there had been any collision, he warned him that on the route then proposed there were settlements of Gújars and Akazai graziers, who would certainly attack them. Major Battye probably underestimated the risk of a collision, or thought, so long as his movements were clearly not offensive, he would be left alone; and it is proved that he felt, if attacked while in British territory, and, so to speak, while moving within his rights, the blame and the responsibility would rest with his assailants.

It is clear that though the march was one likely to bring him into collision with tribes like the Hasanzai or Akazai, already practically at war with Government, yet he took precautions to avoid offence. He never left British territory: when the column was first attacked, he would not answer the fire; when personally assailed, he contented himself for some time with parrying the blows, telling the enemy he had not come to fight, or to harm him.

4. I come now to the conduct of the Khán's brother, Haibat Khán, of the Jemadár of his company, Mirza Amir-ud-din, and of his levies. Of his men it can be said with certainty that they were conspicuous by their absence. The Jaskot villagers turned out, went up the hill, attacked and drove Háshim Ali away; Bhágrián, Belián, Ghaniyán, sent men to assist the troops down. The Khán's brother, his servants, and his men practically did nothing.

Haibat Khan stated he did not know that any troops had left the fort till about 4 p.m. when the constable brought news of the attack. When he heard of it, he could not collect any of the levies, as they were dispersed to their homes, except 20 men or so in Sambalbút and a guard at Dilbori. The statement as to his ignorance is simply incredible. The village of Oghi overlooks the fort, and commands the valley; it is in the highest degree improbable that ten men could leave the fort without being seen from there; and to any one who knows the locality and remembers how the Khán's servants and tenants are all over the valley and fill Oghi itself, it would appear impossible that a column of nearly 80 men, with two British officers, could march out of the fort and go up the Black Mountain without the Khán and all his servants in Oghi being at once informed of it.

Similarly, the Jemadár Amir-ud-din, who was in the tower on the Sambalbút spur with 25 men, says he knew nothing about it till about midday, when a Saiyid of the place told him firing had been heard. He then took ten men with him, crossed over the Barchar, and thence to Hatir, where he arrived after the bodies of the British officers had been brought in. On the way he stopped at Barchar; the Jaskot men overtook him, called on him to help them to attack Háshim Ali Khán's party; he refused, stayed behind; they passed on, drove Háshim Ali away, and the Jemadár then went across to Atir. Captain Inglis, Assistant Commissioner, who came out to Agror at once, and arrived here 36 hours before I did, began some enquiries into the matter, and, starting with a mind perfectly free from bias one way or the other, came to the conclusion that the conduct of both was extremely suspicious, halfhearted, and disloyal.

In the first place, firing on the crest of the Black Mountain can be heard in Oghi and in the fort. I have myself heard it, and there can be no doubt that it would have been heard at Sambalbút, one-third of the way up the hill. Moreover, the march of the column to the foot of the hill to Dewal, full of the Khán's servants and tenants, to Belián and up Barchar, must have been seen both from Oghi and from Sambalbút.

Major Battye mentioned his intention of going up the hill the evening before, while standing outside the fort. It is openly stated across the border that on that evening (17th) two menservants of the Khán—Gulnur, a Goojur, and Muqarrah, a Hasanzai, of a hamlet near Oghi—were sent up to Seri with a message, and that that message was to warn Háshim Ali Khán that a Sahib and some Gurkhas would march up the Sambalbút spur next morning.

Gulnur's mother lives in Seri, and is a servant of Háshim Ali; the son lives in Oghi as a servant of the Khán of Agror: this is but one instance in a thousand of the relations between the dependants of these two chiefs.

Whether warning was sent on the night before or not, I have no doubt that news of the actual starting and the line taken by the detachment was despatched on the morning of the 18th, and reached the crest far ahead of the troops.

Information from beyond the border states that Sher Ali, the Khán's Nazir or Steward, sent a man to the Jemadár at Sambalbút, and that he passed on another messenger to the Khán Khel through his friends the Bangash in Chejri.

If Háshim Ali Khán had not received news before the detachment reached the crest, I do not think he could have appeared on the scene as soon as he did.

The following is an instance of the value of the Khán's servants and of their master's inclination.

On the 21st a man employed by the police told Captain Inglis he had met two of the Khán's levies on their way to Seri with their rifles. A few hours later, Haibat Khán reported that two of his men had deserted. On the 23rd I questioned him about these men, and he professed not to know who they were; he had done nothing to get back their rifles, had not arrested their relatives or touched their property.

I insisted on his getting back the rifles at once, and getting some clue to their families. I arrested and detained the brother of one of these men, an Akazai, a servant of the Khán (camelman). Haibat Khán then did what he could have done 48 hours earlier, *i.e.*, sent word to Háshim Ali; and the rifles of his two servants, who were said to have deserted, were back in British territory within 12 hours.

The probability is that these men were not "deserters," but were sent on some secret business, and finding themselves recognised stayed behind, or that their desertion was connived at to see what notice would be taken of the loss of two rifles. But several men in Agror declared that two of the Khán's men were with the Gújars who attacked the company on the 18th, and that when this was rumoured abroad, the two men deserted. This statement cannot be proved, but, to my mind, it is not altogether improbable.

5. Since I have come to Agror, more has come to light of the intrigues of the Khán of Agror from Murree and of his friend and ally, Mahomed Akbar Khán, Jagirdar of Gidarpur, who is connected by marriage with Fazl Ali, the Khán's agent, and is still more closely united with him by interest and faction spirit. A separate report will be submitted shortly on these intrigues, and the evidence appears to me to show that the Khán and his partizans, notedly Akbar Khán, Jagirdar of Gidarpur, has been active in attempting to stir up the Hasanzai to hostilities, sending remittances of money for this purpose; and that since this affair their messengers have carried their congratulations to the Akazai with advice as to the story to be made up by them if called on to answer for their conduct.

The truth is the village of Oghi itself is full of Hasanzai, Akazai, and Mada Khel, tenants of the Khán or in his service in the levies. All of these, as well as his tenants and servants, who occupy the hamlets on the border and up the slope of the Black Mountain, are freely employed as messengers and spies to carry on the Khán's intrigues with Háshim Ali and the Akazai. It has been reported by the Patwari of Oghi, and the same statement has

come to me from other sources, that one Hamidulla of Maloga, who was sent up to Murree to consult with the Khán of Agror, on his way back succeeded in communicating with Fazl Ali, the Khán's agent in jail, and was advised by Fazl Ali to send word to Háshim Ali Khán to watch an opportunity of doing something if any British officer went near the border. This message was sent by mouth of one Koka, a tenant of the Khán in Arbora, whose brother Hamidulla is a servant of Háshim Ali Khán; the recent march of Colonel Molloy up to Tila near the crest, and perhaps the ordinary route marches of the garrison about the Agror Valley, having suggested that British officers who come out to Oghi would begin to move out about the Black Mountain more freely.

I was authorised some time ago to disarm such men of the Khán's levy as belonged to the tribes of the Black Mountain and seemed untrustworthy, and it may be asked why I have not yet taken action on this. After the episode of the deserters above described, I had intended to disarm the Hasanzai and Akazai among them, but after further consideration I refrained. One reason for putting it off was that the rest of the "company" are practically birds of a feather with the Hasanzai and their fellows. If the 20 odd of the Black Mountain clansmen were disarmed, there was a strong probability that a score or two of the others would be told to run away, and be reported as having deserted from fear of arrest. Besides the Hasanzai, Akazai, &c., there are a number of others on whom we have practically no hold—Akhun Khel, Bunerwáls, Kashmirís, Deshís, Kohistanís, &c., of Independent territory, and the rest who, being only servants of the Khán, would require small inducement to desert. If any are disarmed, all should be; once their rifles are in safe keeping, any of the Swathís, or Tanolies, or others, who can give independent security, or who have land in British territory, might be re-inlisted. I did not care to take the step of disarming the whole company, partly because the question of the Khán's conduct being still under consideration, I preferred to avoid committing Government to anything, and partly because no substitute was ready at hand. I preferred to work on Haibat Khán's self-interest, and warn him how fatal to the Khán any more desertions and rifles lost would be. These men have no intention to fight the Khán Khel, but when they are in a strong tower they cannot pretend to be overpowered; and the Hasanzai not wishing to put their friends the Khán's servants, in a false position will, as they have done, respect the Sambalbút spur and avoid it. Some steps, however, will have to be taken ere long, and my proposals in this connection will be submitted when reporting on the question of the entertainment of levies for the Hazára border after consulting the General commanding the Punjab Frontier Force, as directed in the letter from the Secretary to the Government of the Punjab, No. 317 of 2nd June. Owing to circumstances keeping me in Agror for the past 10 days, I have not been able to see General McQueen yet, but will take the earliest opportunity of doing so. Meanwhile I may say that I submitted to him, on the 5th June, a letter containing my views on the allied questions as to the blockade raised in the letter of the Secretary to Government, No. 275 of 21st May.

6. I come now to the action of the tribes after the affair of the 18th instant and their present attitude. The deplorable events of the 18th of course strengthened the hands of Háshim Ali Khán and his partisans, and encouraged all within and without our border who desire to precipitate disturbances. Soon after I arrived in Agror, a large body of the Hasanzai, of nearly all sections, had collected with Háshim Ali Khán at Tarkanna on the crest between the Sambalbút and Chejri spurs; the Akazai were assembled in full force at Bamphor Gali at the top of the Barchar ridge and at Chapra; and a contingent had come from Phariári.

Háshim Ali Khán's party among the Hasanzai includes besides the Khán Khel, all the Kala Khel, Manza Khán (Kotwal), Nazim Khán (Zakariya Khel), Aladad and Hamidai (Lukman Khel), and others. There were daily jirgas as to how and where to attack Agror, but it was finally thought best to wait till Maulvi Abdulla came with his Hindustánís from Palosai. The Chigharzai and Mada Khel made no movement; the former have espoused the cause of Abdulla of Dilbori, the enemy of the Khán of Agror, and are

not likely to stir at present; and the Mada Khel will keep quiet unless troops are moved across the border.

Meanwhile I sent to the Nawáb of Amb to discuss matters with him, and had an interview with him at Oghi. The affair of the 18th put the Hasanzai out of hand at first, but the Nawáb's emissaries, working disunion among them, succeeded in dividing their counsels, and a portion of this clan (who appear not to have any great desire for war) began to argue it would be better for Háshim Ali to surrender to them his two prisoners, after which they would ask Government to exchange for them their men caught at Darband in May; then send in a deputation, and ask for the release of Turrabáz. The Akazai becoming tired of waiting on the hill, the majority went home, leaving their Maliks to attend another jirga with the Hasanzai when the Maulvi and his men came. The Maulvi actually started and came to Ledh and Bíran (Akazai) on the 26th with 120 men, and to the crest of the hill on the 27th. Meanwhile, however, a large party among the Hasanzai had come to the conclusion they would do. nothing then, and secretly informed the Maulvi and the fanatics. Háshim Ali Khán and his party were bitterly annoyed, but rather than take any active step against the wishes of a part of the clan, and so produce a wider breach, he kept quiet. On the 28th and 29th the gathering dispersed. Of the fanatics 60 are still in or near Seŕi and 60 in Akazai villages, while at the crest they received supplies from our village Chejri (Bangash), and there are still pickets of Khán Khel at Kain Guli leading from Seri, and of Akazai at Bamphor Gali.

It will soon be possible to reduce the garrison again, but I would not recommend this being done till I have had an opportunity of seeing and speaking to General McQueen on the subject of the general defence of the valley. This I will do within a week.

The Nawáb of Amb has done most excellent service in this matter, and I have still hopes his exertions may induce the Hasanzai of his faction to bring some pressure on Háshim Ali Khán, and so lead to the surrender of our captives, in which case we could, I presume, release their men caught at Darband, and permit a jirga of Hasanzai to come in.

As regards the *Hasanzai* tribe, I do not see that the affair of the 18th alters matters; the responsibility for the attack rests with Akazai, while Háshim Ali Khán has added to his previous misconduct by his armed descent into British territory, and the Phariárís their insolence in firing at our men.

If the Hasanzai are made responsible for Háshim Ali's conduct on the 18th, it will be more difficult to get them to effect the release of our two subjects in captivity in Seri. Although it must be admitted that this hostile encounter with trans-border clansmen under blockade was precipitated by the march of a detachment of troops along their border at the top of the Black Mountain, still it cannot be denied that Major Battye throughout kept in British territory, the boundary line of which is supposed to be the watershed of the range, though it is of course ill-defined. The Hasanzai and Akazai do as they please on the top of the hill, and their Gújars graze their cattle practically within British territory. Nor can it be pretended that they had any real fear they were going to be attacked.

It has been common property, and no secret across the border for many weeks past, that there was to be no expedition; the pickets they had put out on the hill top in April had all been withdrawn; they had seen the troops marching up the hill, seen them halt for an hour to breakfast, halt again on the crest, and they knew as well as Major Battye that he had no intention to touch them. Not long before Colonel Molloy had taken a company up towards the crest over Seri and returned without a shot.

To any one who knows the country and the sympathies and feelings of the men in the villages at the foot of and up the slopes of the mountain, it would be clear that the Gújars knew that the troops were marching up the hill, and arranged to attack the rear at a place where the nature of the ground gave them special advantages.

They will, of course, pretend they feared attack themselves, but it is quite certain they would treat in the same fashion a solitary sepoy, a solitary policeman, or a solitary cowherd from one of those few villages in Agror the people of which are not in league with them, although from such an one no fear of attack could be pretended.

Deplorable as is the loss of two British officers, yet from one point of view the affair of the 18th is of less importance than the previous misconduct of Háshim Ali Khán. The events of the 18th only bring into prominence the fact that there are parts of British territory which its servants cannot visit with safety, where the Akazai or their tenants come and go as they please, and shoot other intruders; but this has been known for long past, and seeing the nature and position of the boundary here, it is not altogether to be wondered at.

The former offence of Háshim Ali Khán, for which Government have held responsible the whole Hasanzai, and for which accordingly the whole clan has to account, appears in some ways more serious, as it was a direct challenge to Government—the assertion of the claim that Government could not or had better not deal according to law with Ḥasanzai murderers arrested in British India.

7. I have already noted that one of the gang killed was a Gújar of a British village (Atir near Chorkalan); two Gújars have been arrested near Khaki, who are known to have lost relatives on the 18th June, and there is much reason to suppose they were themselves concerned in the fight against our men. Captain Inglis, Assistant Commissioner, before I reached Oghi, arrested all Akazaís in Agror who could be caught; and though only a small number were seized out of the total, yet among them, living in the villages of the Khán of Agror and under his protection, have been found two nephews of Dadkhan and Mauladad, leading chiefs of the Akazai, *i.e.*, of a clan whom the Khán is supposed to have aided to "blockade" for 4 years past, and another man against whom there has been out a warrant for murder committed in Agror some years ago.

These facts alone illustrate the extreme difficulty of an effectual blockade of the Black Mountain clans on the Agror border.

So long as the Khán and his servants are in sympathy with Háshim Ali and our enemies, his tenants and labourers, the majority of the inhabitants of the valley must, when necessary, screen and assist them; the hamlets up the slopes of the mountain, and many at its foot, are peopled with tenants-at-will of the Khán taken from the very clans who are under blockade. In a few are Saiyids closely related to the Saiyids of Hasanzai, Tili, and Phariári, and in complete sympathy with them.

Even if this sympathy did not exist; if the tenant, following his master, did not secretly aid and give news to our enemies, fear itself, and a certainty of punishment at their hands, would alone determine the action of our nominal subjects on the Black Mountain. We cannot protect them, and they must accordingly serve Háshim Ali and the Akazai, hence their security, while those who have dared to be loyal to us are harried in the plain by raiders who pass the border hamlets and leave them untouched.

Government having decided on the policy of a blockade "patiently and strongly enforced," it will perhaps be well to seek or demand no more than this engine will turn out. To enforce it patiently is easy: to do so "strongly" is in the existing state of things impossible. It has been applied for 4 years against the Akazai (except such as were tenants or servants of the Khán of Agror), and has been without effect for 5 years against Háshim Ali Khán with no result.

The demands which we have already to make against these clans to vindicate our right to catch and punish one of their number who takes to murder in British territory as a profession are as much as, perhaps more than, can be realized by the measure on which Government has decided; and this will deserve to be remembered when the unfortunate events of the 18th are under consideration.

Much has come to light recently of the late intrigues of the Khán of Agror and of Akbar Khán of Gidarpur, the special friend, partisan, and relative of his agent Fazl Ali. On these I will submit a further report; the more I have considered the subject, the more convinced am I that for the future peace and security of this border, it is even more necessary to take firm measures against traitors within our territory than to use force against their allies or dupes beyond it.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT of the PUNJAB, dated 17th July 1888.

FROM the telegram of the Deputy Commissioner, Pesháwar, a copy of which is enclosed, it will be seen that Boner-Chamla and the Khudu Khel tribes along the northern border of Yusafzai have already declined to assist the Black Mountain tribes in their opposition to the Government, although this assistance has just been solicited.

2. This is extremely satisfactory, especially in the case of Boner, as it shows that the recent peaceable settlement of their difficulties with Government has left them unwilling to join a tribal organization against the latter.

It has been unusual hitherto for tribes to refuse point-blank such assistance to their neighbours. In the case of Boner itself, and of a similar application made by it, Swat replied that they would not absolutely refuse assistance to the Bonerwáls if actually attacked, but they begged them to settle their case with Government, and not bring about an expedition which might lead to Swat also being invaded. Such a reply might have been expected, but the immediate refusal of assistance asked for by them should tend to dishearten the Black Mountain tribes.

TELEGRAM from DEPUTY COMMISSIONER, Pesháwar, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 10th July 1888.

ASSISTANT-COMMISSIONER, Mardan, reports Hassanzai and Akazai of Hazára border last week applied for aid to Boner-Chamla and Khudu Khel. The tribes declined to concern themselves in any way in the matter. Hindustáni Colony expressed willingness to aid Hassanzai.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the DEPUTY COMMISSIONER, Hazára, dated 17th July 1888.

REFERRING to your demi-official of the 19th May, with the permission of Government and after consultation with Brigadier-General McQueen, commanding the Punjab Frontier Force, I consider that the Hindustani Colony at Palosi should be treated exactly like the Hassanzai and Akazai tribes and included in the blockade. You should give effect to these orders. I do not suppose that it would be advisable to communicate with them in any way, but merely to issue orders for the seizure of any member of the colony found in British territory.

Not only have they appeared upon the Black Mountain in support of Háshim Ali Khán of Seri; but from a recent letter of yours I understand that on the last occasion their detachment was accompanied by Moulvi Abdulla, the head of the colony.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT of the PUNJAB, dated 18th July 1888.

IN continuation of my No. 3434 of the 9th July, I have the honour to forward a copy of a letter, of the 13th instant, from the Deputy Commissioner, Hazára, regarding the communication of the Nawáb of Amb made to me on the 1st July.

2. I should have said that the occurrences of the 18th June would have had a tendency rather to excite the fears of the clans that they might be attacked by us than their fanaticism, and I should not be surprised if the Hassanzai were to make use of the additional troubles that the Akazai have now heaped up around them, to suggest to Government that their Khán's offences may by comparison be thought of less importance.

3. I had not before heard that the leader of the Hindustáni Colony, Moulvi Abdulla, had himself appeared on the Black Mountain in support of the tribes.

4. The Deputy Commissioner does not attach importance to the Nawáb's letter, or think that its purport need be thought to indicate lukewarmness in the Government cause. He may be right; indeed, we may accept that he is so, because the Deputy Commissioner says further on that he is satisfied that the Nawáb is anxious to bring about a peaceable settlement with the Hassanzai and to make an expedition unnecessary.

This is very satisfactory. I quite admit that the Nawáb has what may be a difficult task before him, but I believe that he can accomplish it if it so pleases him.

From DEPUTY COMMISSIONER, Hazára, to the COMMISSIONER and SUPERINTENDENT, Pesháwar Division, dated 13th July 1888.

I HAVE the honour to acknowledge receipt, on the 12th, of your 3433 P. of the 9th instant, forwarding a translation of a letter from the Nawáb of Amb. What he therein says is much the same as what he told me in an interview at Oghi on or about the 26th June, as was reported to you in my No. 1219 C. of 30th, viz., that he had been in communication with the Hassanzai with a view to induce them to bring pressure on Háshim Ali Khán; that the month of Ramzan was at first pleaded as a reason for postponing business; and that the affair of the 18th June in which two British officers were killed so excited the fanaticism of the clan, that his efforts so far were neutralised or undone. There is no reason to doubt the truth of this: reports received from time to time independently of the Nawáb corroborate it, and you will find it noted in paragraph 4 of my letter of 4th June. The Hassanzai sent men to Háshim Ali Khán to ask him to give up his two captives in order that they might obtain in exchange for them the release of their clansmen caught at Darband. He put them off on the plea that he would discuss these matters with a jirga after the fast was over. It is perfectly well known that, unless there be a strong motive for haste, a Pathán clan will seldom do much business requiring the assembly of jirgas in Ramzan; at any rate the pretext was good enough for Háshim Ali, who wished to stave the question off.

Whenever the matter is known to be mooted in Seri, messengers from the servants of the Khán of Agror are straightway sent to Háshim Ali to remind him that the safety of Turrabáz, the return of the Khán of Agror, and the release of Fazl Ali, depend on his keeping the hold which they suppose the possession of two captives gives him over the British Government.

That the events of the 18th June would undo any efforts made to bring the Hassanzai to act as instruments to enforce the orders of Government, is obvious. The death of two British officers and four sepoys at the hands of trans-border men is happily not an every-day occurrence; it would at once ring through the hills and glens far and near, arousing excitement and fanaticism sufficient to stop at least for a time any negotiations on the basis of former events, which, whatever view may be taken on this side of the border, would to the Hassanzai appear far less serious than this last affair. If this be not self-evident, it is proved by the fact of the clans at once assembling in force on the Black Mountain and the arrival of the leader of the Mujahadin with his followers.

2. As to the Nawáb's letter being dated 22nd June and not posted till 1st July, I cannot explain the delay. In written correspondence he is not a man of business-like habits; is dependent on his munshis. The letter may have been misdated by mistake, or, as you suspect, he may have delayed posting it until he had seen me and asked what he was to do in the altered position of affairs, or he may have purposely antedated the letter, as I had let him know you had remarked on his not sending in more frequent reports.

3. With reference to the concluding paragraph of your letter, I would venture to say that the Nawáb's attitude appears to me as loyal, and his action so far as satisfactory as successful as we can expect. What he calls "suspension of negotiations," seems to me to have been inevitable. After the 18th the demeanour and feelings of the Hassanzai altered; excitement, fanaticism, and, possibly, fear of punishment, united factions till then opposed. Moreover, he may have felt that Government might alter its

views regarding the Hassanzai or Háshim Ali Khán, in consequence of the events of the 18th June, and he would naturally seek instructions before proceeding further.

The suspicion you mention, founded on the dates of the letter and of its postmark, appears to me of small moment compared with the following facts, viz., that our chief hold over the Hassanzai at the present moment is due to the capture of some of their clan at Darband, which was effected by the aid of the Nawáb's servants, and that the dispersion of the "Lashkar" collected on the Black Mountain was in great measure due to his exertions. These are facts which appear to give a surer basis to judge his intentions and attitude than a delay of ten days in posting a letter. I can say with certainty, from his conversation with me in Oghi, that he is anxious to bring about a peaceable settlement with the Hassanzai and to make an expedition unnecessary. If it were not so, he had only to leave the tribes on the hill alone till the Hindustáni fanatics came, when they would probably have committed themselves in a way that might have forced Government to more active measures than a blockade.

The Amir of the Mujahidin does not come from Palosai to the crest of the Black Mountain for nothing, nor for a mere petty raid on a hamlet. That disunion was sown among the clansmen before the Hindustanís arrived, and any serious action staved off for the time, was, as I reported in my letter of 30th June, due in great measure to the Nawáb of Amb. For this reason I see no grounds to suspect his loyalty or good conduct. At the same time it should be remembered that it is one thing to provoke discord and bring about inaction, it is quite a different and a far harder matter to bring a Pathán clan to the point of united action to suit the views or demands of Government. The Nawáb may have been able to do the former; it will be more difficult to make the Hassanzai as a whole coerce Háshim Ali Khán for us.

The captives may of course be bought, but in that case Háshim Ali, who is supposed to be punished, would profit by and not suffer for his deeds. And if we ever took active steps against the Hassanzai, the Nawáb's influence with one section of them would certainly not suffice to keep them all from rallying to give Háshim Ali at least outward support, until the presence of force, imminent and ready to strike, gave them a pretext for leaving their Khán to his fate.

ENCLOSURE No. 25.

FROM OFFICIATING SECRETARY to GOVERNMENT of PUNJAB, to the SECRETARY to GOVERNMENT of INDIA, Foreign Department, dated Simla, 25th August 1888.

IN continuation of my letter, dated 3rd August 1888, I am directed by the Lieutenant-Governor to submit, for the information and orders of the Government of India, letters from the Commissioner of Pesháwar. In the first of these letters Colonel Waterfield places on record his views in regard to some of the questions which are under consideration in connection with the Agror Valley disturbances; and with the second letter he forwards the replies which have been received from the Akazaís, from Háshim Ali Khan, and from Mián Sayad of Parári to the letters of the Deputy Commissioner of Hazára demanding an explanation of their action on the 18th June. It will be seen that Háshim Ali Khán's reply is purely defiant; that of the Akazaís is false in some of its facts, and amounts to a denial of responsibility, which clearly cannot be accepted. Moreover, it shows no wish to sue for terms of peace, or for the removal of the blockade, which in the case of this clan dates from 1884. The reply of Mián Sayad of Parári is submissive in tone; but it is unlikely that the Sayads, still less their Chigharzai tenants, will actually pay up the fines demanded till they perceive that military coercion is imminent.

2. I am desired to invite attention to the views expressed by the Lieutenant-Governor in my letter of the 30th July, and to say that until he receives the orders of the Government of India upon that letter, it will not,

in his opinion, be expedient to correspond further with any of these tribes. Colonel Waterfield understands that the Government of India are still unwilling to use force, and is himself disposed to think that, aided by the expectation of an expedition at present prevailing among the clans, the Nawáb of Amb may be able to bring about an acceptable settlement between Government and the clans. Sir James Lyall is strongly of opinion that military action is necessary to prove to the Khán Khel Hassanzaís and Akazaís that their country is not beyond our reach, and that we have the power to punish them. Till this is done, he does not believe that negotiations will lead to any satisfactory settlement with these clans. In any case the reply which Colonel Waterfield proposes to send to the Akazai jirga appears to the Lieutenant-Governor to be, for many reasons, inappropriate and unpractical. Without the use of force, the Akazaís would never carry out the so-called preliminaries to settlement by jirga.

3. The score against the Akazai tribe is a heavy one. We have—

(1) the unrealized fine of Rs. 2,000 imposed in 1884,* to enforce payment of which the blockade (in force up to date, but never strongly carried out) was imposed;

(2) their responsibility for several raids and offences in 1885, 1886, and 1887; and

(3) their responsibility for the attack on Major Battey's party of the 18th June.

* *See* Punjab Government's No. 402 B., dated 10th July 1884.

And in my letter of the 30th July last above quoted the Lieutenant-Governor explained at length his reasons for holding the Akazaís responsible not only for the attack on Major Battye's party, but also for their active endorsement of Háshim Ali Khán's raid on Odigraon. If fine realized by blockade is to be the only process employed against the Akazaís, we shall certainly not succeed in getting more than the Rs. 2,000 demanded in 1884, and success to that extent is very doubtful, and will probably be, at all events, long delayed. This fine of Rs. 2,000 was imposed in 1884 on the report of Mr. Fryer, then Deputy Commissioner of the district, and an officer of excellent judgment and as considerate and peacefully inclined in his dealings with frontier tribes as any Deputy Commissioner who has ever served on the Punjab Frontier. It is worth while to quote here what he very truly wrote at the time:—

I would treat the Akazai in the same manner: they have killed 4 British subjects and wounded 16. They should pay a fine of Rs. 2,500; and failing that, they should be treated in the same way as I proposed to treat the Parári Syads. There is no other course: if these tribes are fined, they will never pay the fines unless compelled to do so, and blockades will be ineffectual. I see no way of dealing with these tribes except by military force. An example is much wanted on this border; and till one is made, the tribes upon it will continue to treat the British Government with contempt, and to outrage British territory at their pleasure. The Allai, the Akazai, the Hassanzai, the Parári Syads, have all committed offences at some time or other, for which they have either not been punished at all, or if they have been punished, they have either not paid the penalty inflicted, or it has not been sufficiently heavy to hurt them. No tribe on the Agror border has ever felt the British power, and no tribe is afraid of the consequences of wanton attack on the lives and property of British subjects.

Mr. Fryer, in fact, recommended that a heavy fine should be demanded of the Akazaís, and that in default of prompt payment, a military expedition should be sent against them. The Commissioner, Colonel Waterfield, thought that we should try to compel payment of fine by blockade. The Lieutenant-Governor (Sir Charles Aitchison) approved the imposition of blockade; but in reporting the case to the Government of India, it was carefully said that if efforts to bring matters to a peaceful settlement were found to fail, "recourse to military force, however deeply the necessity for it may be regretted, will for the security and peace of the border become absolutely unavoidable." The blockade has proved ineffectual, as Mr. Fryer anticipated; and as the

Paragraph 7 of Secretary to Government, Punjab's No. 42 of 12th July 1884, to Foreign Secretary to Government of India.

Akazaís have still further offended; the time has come to use the only effectual remedy.

4. Colonel Waterfield, however, in his letter of the 28th July alludes to the correspondence on the subject of the Shahtút lands, and suggests the final and complete confiscation of them as one measure of punishment available. Sir James Lyall does not believe that any genuine renunciation of these lands will ever be secured from the Akazaís till their present temper and conceit have been altered by proof of our power to coerce them. It will be seen from the note on the subject which is appended to this letter that the Akazaís have all along maintained a hostile attitude, and showed an unwillingness, even as regards Shahtút, to accept any subordination to the British Government. At the same time it appears that in 1868 and 1869 their misconduct was due in great part to the instigation of the Khán of Agror; and the breakdown of the negotiations in 1882–83 for the restoration of Shahtút to them seems to have been mainly due to the same cause. It will also be observed that the British Government has never really shown its power to the Akazaís or punished them, except by the confiscation of the Shahtút lands, which has been very weakly and irresolutely enforced. In 1875 they were treated with extraordinary leniency, and nevertheless they were practically allowed to repudiate the only part of the arrangement which was disagreeable to them.

5. It seems to the Lieutenant-Governor to be very doubtful whether the proposal of 1882-83 for the restoration of Shahtút to the tribe was a wise measure. The action of the tribe in 1869, after the lenient treatment of it in 1868, fully justified the confiscation of what were, after all, occupancy rights of dubious title. To reverse the confiscation after a long course of unpunished misbehaviour would, in His Honour's opinion, have a dangerous appearance of irresolution and weakness. The case might no doubt be different after a successful use of force and the administration of a severe castigation to the tribe. Under such circumstances, if the measure was otherwise advisable, it might safely be adopted. But it seems to Sir James Lyall to be much more likely that the re-occupation of Shahtút by the Akazai clan would give trouble rather than relief in the administration of Agror. It is well known to the Government of India that our relations with independent tribes holding property within our border are apt to be difficult. The question of the disposal of the Shahtút lands is not one that presses for an immediate decision; but, on the whole, Sir James Lyall is disposed to concur with Colonel Waterfield in thinking that it would be wise to take this opportunity of finally extinguishing the claims of the Akazaís to the lands of Shahtút by granting them to some one else.

6. The cases of Háshim Ali Khán and the Parári Sayads may be disposed of more briefly. In paragraph 8 of the Lieutenant-Governor's note, forwarded with my letter, dated the 3rd May 1888, it was said that the terms of settlement to be demanded from the Hassanzaís should, in His Honour's opinion, be the unconditional surrender of the kidnapped men and a fine amounting to Rs. 5,000 in the aggregate, including compensation to the kidnapped men and the relatives of the men murdered in the Odigraon raid. In my letter of the 30th July it was explained that the Lieutenant-Governor held Háshim Ali and the Khán Khel section of the Hassanzaís responsible for the attack on Major Battye's party; but Sir James Lyall added that it will be impossible to obtain by blockade alone the payment of a heavier fine than Rs. 5,000, if indeed so much can be realized. In fact, if we proceed by blockade alone, the Lieutenant-Governor thinks that this amount will have to be spread so as to cover the share of the Hassanzaís in the occurrence of the 18th June as well as previous offences, and that in all probability, even if the blockade proves more effectual than is expected, this amount will eventually after long negotiations have to be reduced.

7. The claim against the Parári Sayads and the Chigharzaís is Rs. 860, to be raised to Rs. 1,000 if troops are employed against them. In paragraph 10 of the letter of the 30th July the Lieutenant-Governor recommended that if a military expedition were considered advisable, a peaceful settlement with the Parári Sayads and their Chigharzai tenants and allies should first be attempted. The papers now forwarded confirm the supposition then entertained, that there would not be much difficulty in effecting such a settlement.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT of the PUNJAB, dated 25th July 1888.

FROM a demi-official letter received by me from the Deputy Commissioner, Hazára, of this day's date, I understand that he is forwarding to me replies from the Akazai, from Háshim Ali Khán and from Mián Sayad of Parári.

The latter is submissive in its tone, and the Deputy Commissioner has previously said and says again that a firm message to the Parári Sayads would possibly bring them in to pay a satisfactory fine and surrender half a dozen of their leading men and their brothers. But the Deputy Commissioner adds that this might have come about if the two guns had been sent to Oghi as at first ordered.

2. The Deputy Commissioner writes further that all the clans are filled with the fear of an expedition to punish them, but that they will lose the fear gradually and that we should utilise the time while this anxiety yet possesses them, that the Hassanzai do not wish to fight us, or Háshim Ali Khán; within the past few days they sent a jirga to him to ask again for the surrender of the captives.

The agents of the Khán of Agror in Oghi at once sent up money to be spent among the jirga and a message to warn Háshim Ali Khán not to give way; that these men thwart and prevent all that I most wish done and will in the end bring on that which Government most thinks to avoid.

3. The Deputy Commissioner advises that some more of the followers of the Khán, the Mirza, Sher Ali, &c., should be arrested and put in jail and the Khán be finally removed and his removal be publicly announced; that then the surrender of the captives would follow in due course and a satisfactory settlement might be made without resort to force.

As I have only four or five days more to hold charge of this office, I think His Honour would wish to hear the above opinions and my views with regard to them. I have little doubt that the Black Mountain does fear an expedition and that it will make terms if it can; as I have before reported, I think this may come about through the Nawáb of Amb.

But Háshim Ali Khán will not give up the two kidnapped men to the Nawáb, as he (the Nawáb) is an enemy of the Khán of Agror. The Hassanzai may effect their release. It is not in my opinion now a very urgent matter. They are mainly held to make terms with.

4. We are awaiting orders about the treatment of the case of the Khán of Agror. I would deal with that case upon its merits, without thinking whether our actions were to confirm the independent tribes in their opposition and bring down raids on Agror or to lead to the giving up of the captives and the submission of the tribes.

We need not fear raids; it is now my belief that the Black Mountain tribes have no fighting left in them, and that they have no allies upon whom they can depend.

The very uncertainty and delay weakens and alarms them.

I would not advocate dealing with the Parári Sayads or detaching them from opposition. They are not worth it, and don't deserve it, and may be left to inspire others with their own fears.

I will write separately about the arrest of the other followers of the Khán of Agror. It is, I think, a question whether their action does as much harm to the Government, as it does to the cause of the Khán of Agror.

From COMMISSIONER and SUPERINTENDENT, Pesháwar Division, to the SECRETARY to GOVERNMENT, Punjab, dated 28th July 1888.

IN accordance with the orders received I directed the Deputy Commissioner Hazára, to communicate with the Akazaís and demand their explanation of the occurrences of the 18th June and to call upon the Hassanzai and Parári Sayads to explain their appearance upon the scene.

I regret that I have not seen the copies of the letters forwarded to the tribes; these have been called for from the Deputy Commissioner, and without the original letters sent to the Hassanzai the reply of Háshim Ali

Khán is not to me altogether intelligible. On receipt of the Government communications to the tribe they will be forwarded for record.

2. I have now the honour to forward in original to save time Deputy Commissioner, Hazára's No. 10 T. of the 25th instant, forwarding the replies of the tribes.

As regards the Akazai, their accusation against the agent Fazl Ali Khán is of course absurd. He had nothing to say to the action of the Gújars; he is in jail. They must explain their meaning more clearly. They are answerable for their own action whether they accepted the advice of Fazl Ali Khán or of anybody else.

I don't allow for a moment that the entry of police into the Gújars' huts on the Black Mountain is the slightest excuse for the Gújars themselves. I think the chances are much in favour of the police having entered some of the huts; they are almost certain to have done so. Curiosity would have tempted them; I should doubt if they interfered with property.

As regards the punishment which might be inflicted upon the Akazaís with reference to the events of the 18th June, I advise that they be addressed much as follows:—"In reply to your explanation of what occurred on the 18th June, the Government, in default of any further explanation on your part, hold that the Gújars are part and parcel of your tribe, and that you are together jointly answerable.

"They or others have built certain huts at Chapra some of which are within British territory. Government calls upon you for a complete nominal roll of all these Gújars and all others who attacked British troops in British territory on that occasion. Government demands that they shall one and all be driven off the Black Mountain and not allowed to return. Their remaining there is shown to be a source of danger to British subjects in British territory, and liable to bring about misunderstandings between the British Government and an independent tribe with whom the British Government desire to have no concern whatever;—that many buildings erected by your tribe in British territory, that is to say east of the exact watershed, shall be immediately removed and shall not be rebuilt or re-occupied; that no cultivation shall be attempted east of the watershed; that the whole of the property and arms carried off on the 18th shall be immediately returned, otherwise ample compensation will have to be paid.

"After these preliminaries have been satisfactorily settled, the Government will be prepared to allow an Akazai jirga to come in to urge what else they may have to say in their defence and in settlement of all cases against them and to hear the Government terms.

"Meanwhile, until the closing of the settlement, the Government holds itself at liberty to deal with the Akazai as it may think best. Therefore there should be no delay."

As regards final settlement I advise most strongly that the question of the village of Shahtút be again considered, and that the punishment upon the Akazai for this and any other offences be the absolute resumption by Government of Shahtút and of all its lands up to the watershed of the Black Mountain, and that the Akazai be required to accept this and if necessary to give hostages for their future good conduct for such period as Government may consider necessary.

I don't suppose that any similar opportunity can possibly occur for giving Government such an opening as they now have for settling the Shahtút question once for all.

Its cultivation can be arranged for, like that of the rest of Agror, but it must be absolutely and entirely British territory henceforth, and all Akazai rights or claims must be disallowed as a punishment for their conduct which led to the blockade and for their subsequent offences including the attack of the 18th June upon British troops.

3. I hold the office of Commissioner of Pesháwar but for a few days more, and as I have a very long experience of some 15 or 20 years of Agror affairs (I was in Hazára during the expedition of 1868 and often since), I am glad of the opportunity allowed me of roughly sketching my views as to how the difficulties with the Akazai should be finally settled, so as to ensure a marked and public punishment and dispose of the extremely difficult question of Shahtút. With reason I do not advise that the question of

Shahtút be alluded to until the preliminaries have all been complied with, and the representatives of the tribes have come in to hear the Government terms.

The blockade and all preparations for a military expedition (if it has to be decided upon) will continue as before up to the date of final settlement.

4. As regards the Hassanzai I think that the jirga should receive through the Nawáb of Amb a copy of the letter sent to them calling for explanation and of Háshim Ali Khán's reply; and they should be asked what they have to urge regarding both and the charge of fresh interference on the part of their tribes with British territory on the 18th June.

When the letter sent to the Hassanzai is read, the reply may be better understood.

I have already in previous letters expressed my opinion upon the question whether information was sent to Háshim Ali Khán or to the Akazai Gújars to prepare to attack Major Battye and his party on the 18th. The military enquiry ought to show to whom Major Battye made known his proposed march, and at what hour on the 17th, and whether it was possible that it could have been made known to Haibat Khán, the brother of the Khán of Agror, in Oghi village.

5. As regards the reply of the Sayads of Parári, I do not advise that any notice be taken of it at present, unless it is to tell them that it will not be considered until all the arms, and property, taken on the 18th June have been returned; apparently they know something about it.

After that they might be allowed to pay a fine of Rs. 860 or whatever sum may be made up against them, but if there is any delay about the payment of Rs. 860 it should be raised to Rs. 1,000.

If hostages are for any purpose required they can be demanded also, but I doubt their utility unless troops move across the border.

6. The two mountain guns should not be sent to Agror before the 1st October, after which the military garrison can be increased to escort them.

If any of the Khán's servants are intriguing openly against the Government, they should be removed from Agror as political prisoners until they can be dealt with.

After the case of the Khán of Agror has been settled those of his servants should be disposed of, and may be by the same tribunal, but I advise that the Jemadár Commandant of the Khán's 100 men or company be not interfered with as yet for the reasons previously given in this letter.

He can't do any harm, except perhaps to the cause of the Khán, if the reports about him are true, and the border should be kept quiet. This gives the tribes leisure to take in the situation, and when not threatened in their homes they will be without supporters or allies.

From Deputy Commissioner, Hazára, to the Commissioner and Superintendent, Pesháwar Division, dated 25th July 1888.

In continuation of mine of 20th ultimo I have the honour to forward translations of letters from Hazratulla Khán Akazai, Háshim Ali Khán Khánkhel and Miyán Said in answer to the "parwánas" addressed by your order to the Hasanzai, Akazai, and the chief men of Parári.

The first bears only the seal of Hazratulla Khán, but the messenger states he took the parwána to Khán and there gave it to Mauladad and Dadkhan (Tasankhel), two of the leading Maliks, and the reply may be taken as representing the defence of the Akazai jirga. It will be seen that they attribute earlier troubles to the work of Fazl Ali Khán, the Khán's agent now in jail, and allege that the Gújars attacked Major Battye because some soldiers or police by direction of the Deputy Inspector began to lay hands on their property. This statement is a repetition of the story in anonymous petitions which you have received from Manserah dictated by the partisans of the Khán of Agror. Its falseness is proved by the fact that our men were attacked before they reached Chapra; stones were rolled down upon

them, and they were fired at while marching from Bamphorgali, below the crest of the range on the Agror side towards Chapra, at which point the Gújar huts extend beyond the actual boundary or watershed some distance down the eastern slope and within our territory.

It is, moreover, very improbable that the Deputy Inspector of Police would countenance, much less order, any such action which was certain to increase the danger of the march. He was well aware of the risks attendant in any case, as his remonstrances to Major Battye show, and the conduct attributed to him (even had there been no collision or fight) would have been noticed by Major Battye and must have brought him to trouble. Moreover, information from beyond the border, corroborated by the statements of those who saw and heard as reported by me before this letter was received, show that Akbar Khán, Jagirdar of Gidarpur, a close ally of the Khán of Agror and connection and friend of Fazl Ali Khán, sent a servant to the Akazai then collected at Bamphorgali and Chapra to suggest this answer in order to shift the blame on the police and specially on the police officer who arrested Turrabáz.

The "ruqa" or note which Akbar Khán's servant carried, bearing his seal (about which there can be no mistake) and conveying a message of congratulation to the Akazai for their success on the 18th June, is in my possession; and it no doubt prompted the so-called petition from the Akazai jirga posted to you from Manserah (Akbar Khán's post town) forwarded to me with your No. 3289 of 2nd July and the various anonymous letters giving the same version which have been posted to you from the same office. The defence put forward appears to me untrue and unfounded; for further notes in support of that conclusion I would refer you to my letter above quoted (No. 1219 C. of 30th June, paragraph 3) and to No. 7 C. (Tour) of 13 July replying to your No. 3130 of 9th instant.

The truth is that the mere presence of any Government official, whether sepoy or policeman, on their border or near to it, high up the Black Mountain was, and until they learn to fear the consequences, will continue to be in the eyes of Hasanzai or Akazai offence or temptation sufficient to justify or induce their attacking the intruder.

The risk of collision in this unfortunate march was quite enough to explain what followed.

2. The letter to the Hasanzai asking them to explain or answer for the conduct of Háshim Ali in coming down into British territory to Barchar with a band of armed men has been answered by the Khán himself. He does not offer any excuse, but is chiefly concerned with denying the fact that the men of Jaskot defeated and drove him away.

Many circumstances led me to the conclusion reported in No. 1219 of 30th June that news of Major Battye's march preceded him, that messages were sent up by the Khán's officials from Oghi to the tower at Sambalbút, and thence by the Jemadár in command there to warn Háshim Ali Khán and the Gújars that two British officers and some Gurkhas were going up the Black Mountain. The facts which pointed to this conclusion were (1) the prompt arrival of Háshim Ali with a considerable body of men from Seri; (2) the numbers of Gújars engaged in the fight below Chapra, larger than the small camp there would furnish; (3) the incredible stories given by the Jemadár in the tower on the Sambalbút spur and by Haibat Khán in Oghi as to their knowing nothing of this march till late in the day in explanation of their doing nothing; (4) reports from beyond the border and statements made to men by the Gújars themselves; (5) the common talk and consensus of opinion in Agror where it was an open secret that news and warning had been sent up from Oghi and Sambalbút. In the same letter in which this was mentioned (No. 1219 of 30th June) I reported that two of the Khán's riflemen had deserted and run away with their arms and noted the circumstances as arousing suspicion of Haibat Khán's conduct.

For two or three days he did nothing. On the third, being ordered strictly to recover the rifles forthwith, he sent his servants to the deserters (who had evidently run away with the connivance of the Khán's people) and at once got back the two rifles.

Within the past few days these two deserters (Akazai) have been caught by the villagers of Bhágrián, who hearing two men were lurking about on the hill where their goats and herds were grazing, turned out some men armed with rifles, got round and captured them. These two men who were with the Khán's levies on the 18th June in the Sambalbút tower declare that Sher Ali the Khán's confidential servant ("peshkhidmat") came up to the tower from Oghi early in the morning with three men of Kewal, tenants of the Khán, one a Gújar, the others Bangash; after a short consultation between Sher Ali and Mirza Jemadár or Commandant of the levies, the Gújars and another were sent up the Black Mountain with a message to Háshim Ali Khán, and a supply of cartridges. As they did not like the job and Sher Ali doubted whether they would deliver the message quickly, he told the Jemadár to send up two of his men, and he accordingly despatched these two Akazaís, Jalal and Hazrat Gul, with a significant message that the chance Háshim Ali had looked for had come that day. The despatch of these men leaked out as things do across the border, and reports that some warning had passed from Sambalbút to the Seri cattle graziers near Kain Gali became known in Agror. The two Akazai were then advised to run away with their rifles or they might be arrested; that their return hereafter would be arranged; meanwhile they were to leave Agror, and if questions were asked it could be said they deserted for fear of arrest, some Akazaís having a day or two before been arrested by the Assistant Commissioner in Agror.

The statements of these men corroborate what was before reported by me in connection with this special affair of the 18th, and much which had been stated before as to the conduct of the Khán's servants, their full sympathy with Háshim Ali and their intrigues against Government.

For this reason I venture to say that the attack on Major Battye, which has been called "unpremeditated," was so only in this sense, that it was not determined on till the march of the troops was known to those in Agror, who sympathise with the tribesmen under blockade, that news was sent up the hill and preparation made to attack the troops, and that the detachment would assuredly have been attacked had they gone only within rifle range of the crest of the hill and never ventured to the actual border.

3. I now come to the answer of Mián Sayad of Parári. His reply merely fences the question; he does not deny that Paráriwals of Kopra and Saidera turned out and fired at our men in British territory, though he states he was not concerned in the affair, which is probably true. He reasserts his own innocence of previous offences for which he says the men of Saidera, Bilandkot (Parári) and Ghafár Khán of Tarund (Tikri) are responsible. He has, however, since sent in a man of some position to say he is ready to come in and pay a fine of Rs. 300; I told him this would not be listened to; his agent then gave me to understand that Mián Sayad had no desire to risk punishment by force and that he believed he and the principal men of Parári would come in and pay the fines imposed on them (Rs. 860) if a peremptory message threatening heavier terms in default were sent to them.

I cannot say that the men of Kopra or Saidera who are alleged to have come to Mana-ka-danna and fired at our retreating troops were recognised. Mián Sayad's messenger declares the offenders were Akazai from Bíran, Ledh, and grazing camps on the mountain. It is not a very serious matter and might be passed over. For the previous offences in which men of different villages in Parári were concerned His Honour the Lieutenant-Governor directed a fine of Rs. 860 should be imposed to be raised to Rs. 1,000 in the event of their compelling resort to force. Although the tribes under blockade were duly reassured by their partisans in Agror (from the Khán in Murree) that Government had decided not to send troops against them, yet the affair of the 18th June has again set them calculating the chance of an expedition, and the Paráris are at present in some apprehension. I do not of course know what Government may now wish or propose, but if it be thought advisable to bring about a peaceable solution, I think there is a chance that *with the Paráris* a settlement both peaceable and satisfactory might be arranged, so long that is as they are still possessed of the fear which at present influences them.

If this is desired, a short message should be sent to five or six of the principal Sayads and two or three of the leading Chigharzai of the Parári Glens to say—

Your excuses in respect of the past offences proved against you have been considered, but cannot be allowed. You are to pay a fine of Rs. 860 within two weeks, and if you do not, Government will in any way it thinks best realize a heavier fine from you; and you are to give hostages.

I think there is a fair chance that they would submit, and give as hostages a leading man from the villages of Garhi, Saidera, Bilandkot.

Without strongly recommending this procedure, the suggestion is made to be considered for what it is worth.

If eventually any military operations should be unhappily forced upon Government, a settlement with the Paráris would restrict the amount of ground to be covered and the opposition encountered. If the two guns which were lately ordered to Oghi could about the same time be sent (when the weather gets cooler), it would have a marked effect on the stiff necks of these Sayads and Chigharzai. But any such settlement will be difficult to carry through while the Khán of Agror's agents Mirza "Jemadár," Sher Ali, "peshkhidmat," and Sher Ali, Munshi, remain in Oghi.

The letter from Mián Sayad to Fazl Ali Khán which was intercepted and sent up with the papers relating to the Khán of Agror shows that they would do their best to prevent the Sayads from their coming in to make any satisfactory or sufficient settlement and submission.

If the evidence of the Akazaís above referred to be not thought sufficient to clinch the suspicion against the Khán's principal servants and to justify their temporary removal from Agror, it will perhaps be better to let matters take their course and the blockade, which cannot be very rigorous or quickly effectual owing to the nature of the country, to the complete independence of the proscribed clans as regards us and our markets, and to the assistance and sympathy extended to them by the Khán's agents, will I fear in spite of all endeavours continue for some years, as it has in the past against Háshim Ali and the Akazai with no definite or satisfactory result.

The removal of the three intriguers named (two of whom appear liable to punishment for breach of blockade) and a peremptory message to Sayads of Parári might perhaps at this point bring about a satisfactory and sufficiently honourable settlement with one of the three clans with whom difficulties now exist.

TRANSLATION of LETTER from the AKAZAI.

From the JIRGA of the AKAZAI, to the DEPUTY COMMISSIONER, Hazára.

BE it known that we have received your letter, and reply as follows. Before this our affairs were managed by Kazi Mír Alam and after that by Raja Jehandad Khán, in whose time there was peace; whatever troubles have arisen between us and Government have been due to Fazl Ali Khán. For the rest the Sarkar may know that we are not guilty of the death of the two Sahibs. It was the Deputy Inspector of Police who ordered the soldiers to plunder the Gújars' property; the Sahibs were not at fault. The Gújars were angry because their property was robbed and began to fight. Two Sahibs, some sepoys and some Gújars were killed. We were not to blame; we knew nothing; if we had known we would have sent the two Sahibs back safely to the Sarkar. We sent three parwánahs to Government by the Said Khán Gújar of Atir, but they did not reach you, as the Deputy Inspector took them away. It is for Government to decide on peace or war.

Seal of Hazratulla Khán.

Two seals illegible.

TRANSLATION of LETTER from HÁSHIM ALI KHÁN, Khankhel.

From HÁSHIM ALI KHÁN, to the DEPUTY COMMISSIONER, Hazára.

BE it known that your parwánah has reached me, and I have understood its contents. The report that the Agror "lashkar" defeated me is false. The men of Belián, Sambalbút and Jaskot assembled; with 80 men I drove them off and killed some, and the English were killed, then I remained with my armed clansmen on the hill eight days and nights, but "madat"* came to me from you and said "Give us two months (to wait) and send back your army." I did not seek to put off (a fight). It rests with you. I have 2,000 men ready to fight.

* Nobody was sent with any such message.

TRANSLATION of LETTER from MIÁN SAYAD of Parári.

From MIÁN SAYAD of Garhi, to the DEPUTY COMMISSIONER, Hazára.

SAKHI Shah's servant has brought your letter. In reply I write to say that if since I last paid up a fine in Abbott-abad any offence can be proved against me, let me be called on to pay a fine.

The raid on Báhgrián† was the work of Ghaffar Khán, and the Ghanián murder‡ was done by Saiyids of Saidera assisted by Ghaffar Khán. Ghaffar Khán's servants carried off the Khatri of Manserah. As to the fight and firing about which you write I know nothing of it, but a helmet and arms and a sword and other things belonging to the Sahibs who were killed are with Ghaffar Khán's men.§ Why am I called on to pay a fine?

† July 1887.
‡ Murder of Núr Jamál, August 1887.

§ *See* note below (*a*).

Gul Hasan and his friends were seized by Saiyids of Saidera and Bilandkot. I am not to blame in any way. Please write and let me know if I am accused of these acts or not. Written on the 22nd Shawal, 1305.

Seal of Miyán Said.

Note (*a*).—This reference is to Ali, a notorious thief, the man who kidnapped a Hindu in November 1887, for which the Tikri jirga paid Rs. 700 compensation. He left Tikri and settled in Saidera Parári. On the 18th June he was with his cattle on the Black Mountain at Doda towards the Machai peak, but like others in the neighbourhood news of the march of the detachment reached him and he came up in time to join in the fight.

He got Major Battye's sword and helmet and bought a rifle from one of the Gújars. He has probably been with Ghaffar Khán of Trund since the 18th, and Ghaffar Khán got from him the helmet, which his grandson, the son of Abdulla Khán outlaw, offered to send back (being the least valuable or most useless of all the personal property carried off), see my letter of 16th July.

An account of the behaviour of the Akazai tribe in connection with the village of Shahtút.

WE found the Akazaís in possession of Shahtút when we annexed Hazára: their occupation was recent, and they were admittedly outsiders and could show no title to proprietary right, but they had apparently paid no rent or revenue to any authority. Whether they had taken possession of the village (which had been abandoned by a former occupant who held of the Khán of Agror) without leave or had got leave from the Khán of Agror, or the Sikh Thánadár, is not very important. Probably they had overawed the Khán of Agror of the day into letting them occupy on a nominal service tenure. The Akazaís seem, however, to have considered that, whatever their tenure in in Shahtút was, it belonged to the whole clan, not to individuals. They seem to have adopted a somewhat hostile and independent attitude towards us from the first, not admitting that they were British subjects as regards Shahtút,

though it is well within the Agror boundary; but as we let them practically alone they did not otherwise seriously misbehave till 1868, when at the instigation of the Khán of Agror they joined in the attack on our police post at Oghi. This attack led to the Black Mountain expedition of 1868, the result of which as regards the Akazaís was that they were allowed to give in a nominal submission, but were told that they must henceforward accept the position of British subjects as regards Shahtút, and pay a small sum as revenue in recognition thereof. The extraordinary leniency shown to the Akazaís in the expedition of 1868 encouraged them to resist us. Our troops had not reached any of their villages and we had exacted no fines or compensation from them. Accordingly in 1869 two serious raids were made on Agror villages by the Akazaís and others as partisans of the Khán of Agror, who was then in confinement as a traitor to our Government. For this the Shahtút houses were destroyed, and the lands declared by proclamation to be confiscated to Government, and the Akazaís prohibited from re-occupying them. In the spring of 1870 they made three other bad raids on Agror villages. Soon after in June 1870 the Khán of Agror was pardoned and allowed to return to Agror; the Akazaís expected to get back from him the lands of Shahtút, but as this was not allowed by Government, and was also not desired at heart by the Khán who claimed the lands for himself, they became very hostile, and made several other bad raids in 1871. In 1872 and 1873 they committed several border offences and one raid, and in 1874 and 1875, they were specially active, and either alone or in concert with the Khán Khel Hassanzaís they raided repeatedly and harassed the Agror Valley continually. Military coercion, which had often been proposed before, then seemed inevitable; but with the memory of the expensive and important expedition of 1868 in mind, the Government of India were unwilling to undertake the effort, and the Akazaís and Hassanzaís being somewhat tired of the business and having quarrelled among themselves, were induced to send in their jirgas, which (after being feasted and rewarded with small presents) tendered a nominal submission, or in other words received a free pardon. This submission by the Akazaís was called "a complete and voluntary submission," inasmuch as they consented at the time not only to themselves finally abandon all claim to Shahtút, but also not to oppose our allotting the lands for cultivation and occupation to our own subjects. But though this measure was sanctioned for immediate execution by the Punjab Government, the local officers listened to subsequent objections by the Akazaís, and refrained from carrying it out for fear of offending them.

In 1879 the Akazaís commenced without leave to re-occupy the Shahtút lands. The local officers took no active notice of this at first, and the notice taken later on resulted not in their expulsion but in a proposal made by the Commissioner of Pesháwar to reverse our whole previous action and to formally restore the whole of the Shahtút lands to the Akazaís to be held by them practically as foreign territory. This proposal was approved in the interests of peace by the Punjab Government, but with the proviso subsequently attached that the lands would remain British territory though no revenue would be imposed. This extraordinary benevolent arrangement was not however accepted by the Akazai clan as a whole, owing to disputes among themselves, the hostility of some of them to the British Government, and the secret but notorious intrigues of Fazl Ali, the agent of the young Khán of Agror, who did not wish the arrangement to succeed.

Some of the Akazaís who were opposed to the arrangement or were partisans of the Khán of Agror raided on Shahtút and destroyed the houses erected there by other Akazaís. Eventually the Punjab Government agreed that the plan of restoring Shahtút to the Akazaís must be abandoned for the present and the old orders in regard to it be maintained.

In 1884, in consequence of raids committed by the Akazaís, the clan was declared blockaded and a fine of Rs. 2,000 was demanded. The fine has never been paid nor has the clan offered to submit. On the contrary it has been guilty from time to time of petty border offences, and has now actively supported Háshim Ali in his policy of hostility to Government.

The Khán of Agror was naturally at heart opposed to the restoration of Shahtút to the Akazaís, as he hoped to secure the lands for himself eventually, and as the establishment of the Akazaís there as proprietors and British

subjects was not in accord with his policy of making himself supreme in Agror. He and his agent Fazl Ali were therefore angry with Abdulla Khán of Dilbori (a member of the Khán's family and the son of a man who had been the right-hand man and at some times the rival of the old Khán of Agror) for having among other things actively aided the local officers of Government in the negotiations with the Akazaís and other clans which preceded the proposed restorations of Shahtút. The Khán accordingly took advantage of an entry in the Settlement papers of doubtful equity which made Abdulla Khán a mere tenant of will under the Khán of all the lands he held in Agror, and ousted him from these lands. The Government did not see its way to interfere in a matter which was one of civil right, and Abdulla Khán crossed the border and in revenge and the hope of forcing the Khán or the Government to restore him his lands, he made raids on Agror villagers, aided by the general sympathy of the clans and the hostility of certain sections of the Akazaís and Chigharzaís to the Khán or to the Government. Abdulla Khán is still an outlaw across the border.

ENCLOSURE No. 26.

TELEGRAM from VICEROY, Simla, to SECRETARY of STATE, dated 29th August 1888.

AFTER lengthened consideration and consultation with the Punjab Government, which is very strong on the question, the Government of India has concluded that an expedition to punish the aggressions of the Black Mountain tribes has become absolutely necessary. It is proposed to assemble the requisite force by the 1st of October; and it is expected that the objects of the expedition will be secured in about three weeks.

ENCLOSURE No. 27.

TELEGRAM from VICEROY, Simla, to SECRETARY of STATE, London, dated 3rd September 1888.

BLACK Mountain Expedition. I conclude that I may issue orders in accordance with the conclusions communicated to you in my telegram of the 29th.

ENCLOSURE No. 28.

TELEGRAM from SECRETARY of STATE to VICEROY, Simla, dated 3rd September 1888.

YOUR telegram of 3rd September. Black Mountain Expedition. Quite content to leave the matter in your hands.

ENCLOSURE No. 29.

From SECRETARY to GOVERNMENT of INDIA, Foreign Department, to the SECRETARY to GOVERNMENT of the PUNJAB, dated 21st September 1888.

I AM directed to acknowledge the receipt of your letters regarding the disturbed state of the Agror border, and the death of Major Battye and Captain Urmston.

2. The Honourable the Lieutenant-Governor considers that the facts adduced in the correspondence above cited support him in the opinion which he expressed in January last, as to the urgent necessity of despatching a punitive expedition against the Black Mountain tribes. His Honour recommends that the Akazaís should be held responsible not only for the attack on Major Battye's party, but also for their active support of Háshim Ali Khán's raid on Udigraon at the beginning of the year. The Khán Khel

Hassanzaís and Háshim Ali Khán he would also hold responsible for both offences. In the event, however, of military operations being sanctioned, Sir James Lyall considers it desirable that endeavours should be made to limit the scope of such operations as far as possible. With this object, he recommends that a peaceful settlement with the Parári Syuds and their Chigarzai tenants should first be attempted. He believes that there will be no difficulty in bringing this about as soon as it is understood that the Government is prepared to use force, though it is unlikely that the Syuds would actually pay up the fines imposed until they perceived that military coercion was imminent. In the same way, the Lieutenant-Governor thinks the Hassanzai might be told that the expedition will be directed solely against the Khán Khel section and the Akazaís, unless the other sections of the Hassanzaís take part against us. In this manner Sir James Lyall believes that it may be possible at all events to create a division in the clan; and by similar arrangements he thinks the Madda Khels might also be influenced to hold aloof from Háshim Ali Khán and the Khán Khels. It is understood that some assurances will also be given to the Chigarzai tribe, and all other Black Mountain tribes and sections with whom we have no immediate quarrel.

3. The Governor-General in Council has given his fullest consideration to Sir James Lyall's proposals, and I am now directed to inform you that the despatch of a punitive expedition has been sanctioned, and that the proposals of the Honourable the Lieutenant-Governor as to the scope and limitations of the expedition are approved. The object in view is to coerce into submission the Akazai and the Khán Khel of the Hassanzai. All other tribes and sections upon the Black Mountain may be informed that the expedition is not directed against them, and that if they remain quiet they will not be molested. With regard to the proposed march on Thakot, I am to enquire whether, in the Lieutenant-Governor's opinion, an advance in that direction would so far improve the prospects of future tranquillity as to compensate for the inconvenience of thus extending the military operations.

4. With regard to the terms to be imposed upon the Akazaí and Khán Khel, the Governor-General in Council will not interfere with the Lieutenant-Governor's discretion, but I am to say that we should not accept from them anything less than we have already asked. The punishment to be inflicted upon any other tribes or sections which may join against us will be left for the consideration of the General commanding.

5. His Excellency the Viceroy will leave to Sir James Lyall the appointment of political officers required to accompany the force. It is requested that a copy of the instructions which His Honour intends to issue for their guidance may be forwarded for the information of the Government of India. It is considered desirable that the General commanding should have supreme political authority.

6. Finally, I am to enquire whether His Honour the Lieutenant-Governor thinks it practicable and desirable, when the offending sections have been punished, to make such arrangements with regard to the construction of roads, or other matters, as will for the future render the tribes of the Black Mountain less able to commit, with hopes of impunity, depredations on our territory such as have necessitated the present expedition.

LONDON: Printed by EYRE and SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

MAP OF THE
BLACK MOUNTAIN.
AND
COUNTRY ADJOINING AGROR.

Scale 1 Inch = 4 Miles.

British Boundary.
Mountain Ridges and Spur.
Tribal Boundaries.

RETURN.

EAST INDIA (ARMY).

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EAST INDIA (ARMY).

RETURN to an Address of the Honourable The House of Commons, dated 31 January 1887;—*for*,

"COPY of, or EXTRACTS from, CORRESPONDENCE on the Subject of the INCREASE of the ARMY in INDIA."

India Office,
March 1887.

JOHN E. GORST,
Under Secretary of State for India.

BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.

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332.

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COPY of, or EXTRACTS from, CORRESPONDENCE on the Subject of the INCREASE of the ARMY in INDIA.

— No. 1. —

TELEGRAM from Viceroy, dated 12 March 1885.

WE desire your authority to complete the four Punjab and two Bombay Native Mountain Batteries to six guns, and to add 200 men to each of the eight Goorkha regiments.

— No. 2. —

TELEGRAM to Viceroy, dated 12 March 1885.

YOURS, 12th, Mountain Batteries and Goorkha regiments I approve.

— No. 3. —

TELEGRAM from Viceroy, dated 13 March 1885.

I AM inclined to ask you to allow us to raise three additional Goorkha regiments.

— No. 4. —

TELEGRAM to the Viceroy, dated 16 March 1885.

IF you can bear expense, additional Goorkhas seem to me very desirable. If the three regiments are to be additional to the 200 men for the eight regiments, would it not be better to add second battalions of present strength to five regiments.

— No. 5. —

(No. 44 of 1885.—Military Department.)

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Fort William, 17 March 1885.

WE desire to address your Lordship regarding the formation of a reserve for the Native army.

2. The subject was referred to by Lord Lytton's Government in 1879 as one of the principal reasons which led them to propose the appointment of the Army

Commission in that year. Their Despatch on the subject, No. 168, dated 22nd May 1879, states the case in the following terms: —

> "12. The improvements in arms and in military administration during the last 20 years have revolutionised every great army in Europe; but perhaps the greatest and most important change effected in this period has been the introduction, or immense extension and improvement, of the system of reserves. The Indian army is now the only large army in the world which has no reserves. In other words, India is the only country which, maintaining a large army, pays in peace time for the whole available force which it can put into the field in war. The expense of such a system is patent. Without, therefore, committing ourselves to any premature opinion as to how far a reserve system can or cannot be worked in India, we think that there is at least such *primâ facie* evidence in its favour as to demand the fullest consideration for it; and we would go further and say that, so far as we can at present judge, it is in this direction that there is the best prospect of an important diminution of our military expenditure."

There is no doubt that the strength of a Native regiment, even as augmented in 1882 to a total of 832 of all ranks, is insufficient for active service. A regiment of that strength, when sick and inefficient men are weeded out, will take the field as a very small battalion, and under the stress of campaigning may soon cease to be an efficient military unit. Yet at present there are no means of augmenting battalions in the field, save by the process of recruiting; and in the present state of the labour market, and at the present rates of the soldier's pay, recruits are to be obtained but slowly. This was very clearly brought out by the experience of the Afghan war, and the Army Commission recommended in strong terms the formation of a reserve. The paragraphs of their report dealing with the subject are annexed to this letter for ready reference.

4. A reserve presents the most simple and effective way of augmenting the army rapidly on an emergency. On the other hand, objection may be taken to any arrangements which would increase the strength of the Native army without a corresponding proportionate increase of the British troops in India. But on this point it may be observed that under stress of an emergency an increase of British troops could be counted on, provided effective means were taken to secure it. It is merely a question of the degree of inducement offered; and recruiting is usually more brisk for the British army during war than in peace, whereas there is no certainty that native recruits will be readily forthcoming in case of the Indian army becoming engaged in extensive and difficult military operations. Even if recruits could be obtained quickly, the process of training them must necessarily be slow, and indeed the only way of obtaining what is desired, namely, the means of rapidly increasing the effective strength of regiments, appears to be through some form or other of a reserve through which the sepoy should be passed after a few years' service in the ranks.

5. Actual trial can alone show whether any terms, such, for instance, as those the Commission propose, would be successful in inducing a sufficient number of men to enter a reserve. But before elaborating a complete scheme for the purpose, we think it would be advisable to make the experiment in the first instance on a small scale, which, if it proved successful, might be extended hereafter.

6. There are two ways in which the experiment might be carried out; first, according to the method proposed by the Army Commission, under which the men passed into the reserve would still belong to their respective regiments, and would rejoin them when called out. The organisation of the Bengal army in class regiments specially lends itself to this system which, however, of course involves that the reserve soldiers would be often living at a long distance from their regiment, as it moves from station to station.

7. In the case of mixed regiments, which recruit from various classes and districts, the reserve men would necessarily be a good deal scattered about; but this might be politically advantageous rather than otherwise.

8. Another

8. Another plan would be to make the reserve territorial in character, that is, the men passed into the reserve would not belong to any particular regiment, but would be called up and form a battalion to be stationed at some place near their homes. And this plan might prove the more attractive, especially if it were understood that the reserve battalion would be required only for duty in India, and would not be required to go on foreign service. It would not, however, fulfil one important object of a reserve; namely, to strengthen the regiments taking the field. but it would admit of more regiments being sent on service than would otherwise be possible. There are certain points which, under any circumstances, must always be held by troops. The duties in such places might be taken by reserve battalions, which would set free the troops stationed there for active service.

9. We are disposed to recommend that each of these methods should have a trial, and we should wish to be authorised to apply the reserve system to, say, 10 regiments of the Bengal army in the first instance, and to form one or two reserve battalions on the second plan.

10. The men sent to their homes on the first plan might be considered to be on long furlough, and the term "Reserve," might be confined to the local or territorial battalions.

11. The long furlough men should be liable to be called up for training once a year or once every two years, as might be found most advisable, receiving pay while under training, and a gratuity not exceeding 20 rupees for each month of such training, after it is over; these men would be liable to be called up to their regiments whenever required.

12. It would be for consideration whether these long-furlough men should receive a gratuity at the end of their service, which might be limited to 15 years in all. We should be disposed to give a gratuity of 120 rupees at the expiration of the 15 years' service, that with the colours included.

13. The number of long furlough men might be limited to 250 men per regiment.

14. The term "Reserve" to be applied, as proposed above, to those who leave their regiments finally for the purpose of joining it, and are formed into local battalions. These men to be called out for thirty days' duty once a year, receiving a gratuity of 24 rupees at the expiration of it. The clothing, accoutrements, &c., for these men to be kept with the battalion at head-quarters. The battalion to have native officers and non-commissioned officers on the same scale as the regular army; these men might be chosen from those also on the reserve list, or from pensioners who are efficient and who would be entitled to a proportionate gratuity at the end of their month's service.

15. The battalion to have a commandant on 200 rupees staff, and an adjutant; also a small native staff sufficient for the custody of the arms, clothing, &c., of the battalion.

16. No man to be admitted into the reserve if of more than 10 years' service; but his service in it to be unlimited so long as he remains efficient. No pensions or gratuities to be given when any man leaves it. We would propose to raise two such battalions in the first instance, namely, one at Allahabad and one at Jullundur.

17. Long furlough men from the regular army could either join these local reserve battalions for their annual training, or some corresponding class regiment of their own, if their own regiment were too far off for them to join it conveniently. This is a matter of detail which can be worked out more fully hereafter.

18. The foregoing is an outline of the conditions which appear suitable for the case. But it is probable that experience may indicate modifications to be desirable, and we would prefer to proceed tentatively in the matter, rather than to commit ourselves to a hard-and-fast scheme, which might not be found to work well in practice. We would therefore ask your Lordship's sanction to our making a beginning on the lines here indicated, of a measure which appears to us to be

imperatively called for in the interests of military efficiency, and of which, as it must take a long time to produce any appreciable result, a beginning should, we think, be made without further delay.

19. The pension rules would remain unaltered for the soldier who remains permanently with his regiment.

20. As regards the probability of soldiers being readily available for a reserve, we attach some tables which were prepared in 1883, showing the length of service of the sepoys of the Bengal and Bombay armies, which bring out a somewhat remarkable result. In the Bengal Infantry no less than 43·88 per cent., or not far short of one-half, were men of under five years' service, and 68·34 per cent., or more than two-thirds of the whole strength, were under 10 years' service. In the Bengal Cavalry the proportion of short-service men is somewhat smaller, but it is still a very large proportion.

21. It might, perhaps, be supposed that this state of things was due to the losses which occurred from deaths and invaliding through the Afghan War, and the large addition of young soldiers; but a similar table prepared for the year 1877 shows that the proportion of young soldiers was then only a little less than at present; 37·54 per cent. were under five years' and 64·28 per cent. under 10 years' service. Of the Bombay army 39 per cent. were under five years' service, and 61·16 per cent., or nearly two thirds of the whole number, were under ten years' service.

22. The result brought out by these figures appears to be that, whether a reserve be created or not, the army is, in fact, a short-service army, and that there must be a large number of young trained soldiers scattered all over the country who have voluntarily taken their discharge. The effect, therefore, of creating a reserve formed of long-furlough men would not necessarily be to pass more men through the ranks than at present; they pass through the ranks now very quickly. The effect of the measure would be to retain a lien on the service of the men who now close their connection with the army on leaving it.

We have, &c.
(signed) *Dufferin.*
D. M. Stewart.
J. Gibbs.
T. F. Wilson.
C. P. Ilbert.
S. C. Bayley.
T. C. Hope.
A. Colvin.

Enclosure in No. 5.

EXTRACT from the Report of the Army Commission of 1879, paragraphs 258 to 268.

258. *Question of Reserves.*—The want of some system of reserves for India has often been felt, and the subject has been brought forward from time to time. The success of the German system has shown that the existence of army reserves gives an immense, and at the same time an economical, increase to the military power of a nation. Lord Napier of Magdala recommended* the formation of reserves for the Indian Army when he was Commander-in-Chief. His Excellency Sir Frederick Haines concurred† in Lord Napier's opinion as to the necessity for forming a reserve. The Bombay Government also accepted the views of His Excellency Sir Charles Staveley, then Commander-in-Chief of Bombay, that the State ought to retain a lien on the services of pensioned soldiers. Nearly all the regimental officers of the Bengal and Punjab armies, especially those who were engaged in the Afghan campaign of 1878, are convinced that some system of reserve is needed, by means of which regiments ordered into the field can obtain at once a supply of

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* *See* letter No. 2857, dated 16th November 1874, from General Lumsden, the then Adjutant-General.
† Madras Adjutant General's letter of 27th July 1876.

of disciplined soldiers to fill vacancies caused by casualties, and to take the places of invalids or others sent to the depôt. As has been stated above, the officers of the Madras and Bombay Army Corps hold that drafts from linked or other battalions can best supply this need. Officers of the two Northern Army Corps, on the other hand, say that some system of regimental reserves ought to be established, under which disciplined and effective reservists could be recalled to the colours at a week's notice. They report, moreover, that such a system of reserves, if combined with localised recruiting grounds and fixed regimental depôts, would be most popular with the best fighting races, of which the Northern armies are composed.

259. *Political aspect of Reserves Question.*—There can be little doubt that the maintenance of army reserves in India would greatly increase the offensive and defensive power of the Indian Army. At the same time, it must be remembered that our Native Army is a mercenary force serving an alien Government. Even if it were desirable, it would not be possible to impose compulsory service in the army of reserve on any large section of the population. And it would be politically inadvisable to adopt for India the short-service system of Europe, whereby the largest possible number of men are passed through the army, returned into the general population, and are kept by periodical training in a state of military efficiency. There can be no advantage, and there might be much risk, in scattering hundreds of thousands of trained reservists over the several provinces of India. The services of such large numbers would never be needed, and the cost of their maintenance would be very great. Under the present system, however, a considerable number of trained soldiers already pass from our army annually into the general population. According to the returns for five years, 7,778 Native soldiers leave the army annually, of whom 4,612 retire on pension. Thus, in 10 years' time, nearly 80,000 trained Native soldiers return to their homes. Any plan which retained a proportion of these 80,000 men in army reserves, and bound them to the British Government by sufficient money payments, would meet the requirements of our military system, without increasing the number of trained soldiers annually absorbed in the general population.

260. *Creation of two lines of Reserve.*—We attach great importance to the opinions of so many distinguished soldiers, and of so many experienced regimental officers in favour of a reserve system. At the same time we recognise a distinct political danger in any indefinite increase of the number of trained soldiers passed annually into the population of India. We consider, however, that the provision of efficient reserves can well be combined with some revision of the pension rules. We propose that a strictly limited reserve of 200 men to every infantry regiment be eventually maintained. The reserve would consist of privates, inhabitants either of British territory, or of States within the frontier of British India, who, after 12* years' service with the colours with good character, might choose to pass into the reserve. They would receive a reserve pay of 4 rupees a month, payable half-yearly; they would belong to the first reserve till they reached 21 years' service; during their service in the first reserve they would be liable to embodiment for two months in every two years, and to service with the colours whenever summoned; they would receive, during the period of their embodiment, in addition to reserve pay, the full pay, and good-conduct pay, which they might have been drawing when they joined the reserve. At 21 years' service they would pass to the pension list, or second reserve, where they would continue to receive a pension of 4 rupees a month, and would be liable for service on garrison duty only when summoned. After 32 years' service they should be liable for no further service, but would enjoy their pension of 4 rupees a month for the remainder of their lives. It would rarely be necessary to exercise or embody the second reserve; but they could, in time of necessity, usefully take garrison duty in cantonments or fortresses. The first reserve would be embodied at the regimental depôts; and their two months' exercise would include rifle practice. A British officer, with sufficient strength of Native officers and non-commissioned officers, and a medical subordinate, would be deputed to the depôt from the regiment once in two years, to exercise the reserves. The second reserve, when called out, would be armed from the nearest depôt or arsenal. As the first reserves of different regiments would be called up for embodiment in alternate years at the time of year least inconvenient for agricultural operations, arms, uniform, and accoutrements for 200 men would suffice for the reserves of two regiments; and therefore one-half only of the reserve equipments need be kept at the depôts, in custody of the Native regiment cantoned at the depôt headquarters, the remainder being kept at the nearest arsenal. Reservists on embodiment for exercise would be sheltered in standing camps, wherever the depôt buildings and huts did not furnish sufficient accommodation.

261. *Cavalry Reserves not proposed.*—We do not propose to constitute any first reserves of cavalry, because we consider that the country cannot afford to maintain a large reserve of horses. Native cavalry reservists who had no exercise with their horses would soon become

* Twelve years is named as the period before which a soldier should not be passed into the reserve. But the Commission feel that this term should be open to re-consideration at special times and for special reasons.

See Appendix XXXVI.

become inefficient. We think, however, that the change in the pension rules, and the liability to garrison service in the second reserve, should for the future apply to cavalry as well as to infantry.

262. *Sappers and Miners.*—We recommend that the reserve system be applied to the sappers and miners, but we are of opinion that sapper reservists should, when called up, be formed into reserve companies, which would be able to take the place, in garrison, of those proceeded on active service. Every effort should be made to employ reserve sappers in suitable positions in arsenals and railway workshops.

263. *Present Pension Rules.*—The present pension rules give to sepoys (privates) of the Native Army—

(*a*) an invalid pension of four rupees a month, or about half-pay after fifteen years' service;

(*b*) a full pension of seven rupees a month after 32 years' service.

In the Bengal and Punjab armies very few soldiers, less than 100 a year, serve on for the full pension. About 4,600 soldiers in the four armies retire on invalid pensions every year. It is reported by many officers that soldiers who fail to earn promotion to the non-commissioned ranks, habitually malinger and qualify for invalid pension when they reach 15 years' service; whereas it is generally considered that a native soldier is fit for active duty until he is 40 to 45 years of age, that is, until he has completed 20 to 25 years' service. There are wide differences in the tenacity with which soldiers of the four armies cling to the service. For instance, in the Bengal and Punjab armies at the present time, only 11 per cent. of the men are over 15 years' service; whereas, in the Bombay army 23 per cent., and in the Madras army 37 per cent. are over 15 years' service. So, again, in the Bengal army only 21 men per mille retire on full pension annually, whereas in the Bombay army 41 per mille, and in the Madras army, 67 per mille retire every year on pension. Large numbers of sepoys in the Bengal and Punjab armies take their discharge before they have served five years; some of these men, however, re-enlist.

264. *Pension Rules modified to suit Reserve System.*—The pension rules of the Native army would necessarily remain as they now are for soldiers already in the service. But for soldiers enlisted on the new system there would be no invalid pensions, except for wounds and sickness on field service, or for sickness contracted on foreign service. Every private would be entitled, subject to his serving in the second reserve until he attained 32 years' service, to retire on a pension of 5 rupees a month after 21 years' service, unless he had previously joined the reserve. The full pension of 7 rupees for privates of 32 years' service with the colours would be maintained. The present rates of officers' and non-commissioned officers' invalid pensions would be maintained for men now in the service. But for future recruits no pension, either for officers or men, would be allowed, save for wounds and sickness contracted on field or foreign service, until after 21 years' service with the colours, when the present invalid pension would be claimable without a medical certificate of unfitness, but subject to service in the second reserve. The full pension after 32 years' service would stand as at present. Men who retired without earning pension, and without joining the reserve, would receive gratuities as at present. We do not recommend the abolition of the present invalid pension after 15 years' service without full consideration. We find that His Excellency Lord Napier of Magdala recommended (in 1874) that invalid pensions should cease, that no pension should be given to Native soldiers who had done less than 20 years' service, and that to a man who broke down in the service from ordinary causes, before reaching 20 years' service, gratuities up to a maximum of one year's pay should be given. We are convinced by the testimony of many regimental and staff officers that the invalid pension is an abuse under the present system, and we consider that a pension after 21 years' duty with the colours, combined with a system of reserves and reserve pay, will be more satisfactory to the soldiery and more beneficial to the country.

265. *Officers and Non-Commissioned Officers not to be passed into the First Reserve.*—We do not propose that any officers or non-commissioned officers should be passed into the first reserve, because we consider that officers for the reserve can best be supplied by temporary promotions from the fighting ranks. It is not desirable that the company leaders or non-commisioned officers of the reserves should be men of very mature age, or whose knowledge, drill, and company tactics were obsolete. In a separate section of this report we have shown how a reserve of British officers for field service would be supplied.

266. *Strength and Cost of Reserves.*—In applying this system of reserves to the Native army, some regiments will be found, such, for instance, as the Goorkhas, in which the formation of a "first reserve" will be almost impossible. But, apart from any such cial exceptions, we recommend that the reserve system be made applicable to all infantry regiments of the four army corps. We advise that the abolition of invalid pensions after 15 years' service, and the obligation on all pensioners for duty in the second reserve up to 32 years' service, should be carried out at once, so far as future enlistments are concerned. We recommend also that men now with the colours should

be

be permitted to elect, if they so desire, for the new pension rules, that is, for the pension of 5 rupees after 21 years' service, with liability to duty in the second reserve instead of invalid pension of 4 rupees after 15 years' service. In order that a part of the reserve strength should be established as soon as possible, we recommend that commanding officers of regiments, to which the reserve system is applied, be allowed to arrange at once for raising half their reserves (*i.e.*, 100 men per infantry regiment) by passing into the reserve men now in the ranks, of 12 to 18 years' service, or by inviting men who have already retired to join the reserve. Hereafter, a fixed proportion of men would be passed, at their option, into the reserve annually. For every hundred reservists required for a regiment, 14 men, who had served on the average 13 years with the colours, would be passed into the reserve. This number would allow for a due proportion of casualties in the reserve. Under the system proposed by us, the country would have, when the first and second reserves were in full operation—

(1.) 200 men per infantry regiment in the first reserve ;

(2.) Approximately 320 pensioners per infantry regiment in the second reserve.

If first reserves were formed for 96 infantry* regiments, and if the second reserve system were carried out throughout the army, then the total eventual strength of the reserves might be—

(1.) *First Reserve*, 19,200 infantry.

(2.) *Second Reserve*, 33,000 infantry and 6,000 cavalry.

267. *The proposed system could cause no political danger.*—It will be seen that our proposed reserves (58,200 in all) will form a part of the total number of soldiers (80,000), that under the present system are absorbed every 10 years into the general population. We consider therefore that this restricted reserve system can cause no political danger to the country. Moreover, the reserve system, or some extension of it, might hereafter in time of profound peace enable the Government to reduce the peace strength of the Native army. We anticipate that the cost of reserves, and of pensions as above proposed, will not increase appreciably the cost of pensions to the Native army under existing rules.

268. *Employment of reservists in civil duties.*—A reduction in the cost of the reserves will be gained, if any large proportion of the first and second class reserves are employed near their homes by the civil governments as policemen, as jail guards, on railways, and in other capacities, where disciplined men of good character would be of great use. The several local governments who have favoured us with replies on this point, say that they would be ready to employ reservists in civil departments of the Governments, thus :—

The Bombay Government would employ - -	1,500	Total 7,200
The Bengal Government - - - - -	1,300	
The Punjab Government - - - - -	1,500	
The British Burmah Government - - -	900	
The Central Provinces Government - - -	1,500	
The Berar Government - - - - -	500	

The Madras and North Western Provinces Governments have stated that they cannot employ reservists in civil departments. We recommend that one-half reserve pay and full pension, when earned in addition to full pay during embodiment, be granted to reservists who may obtain active employment and pay in any civil department. The army must keep, and must pay for its hold on the reserve. Reserve men would revert to their full reserve pay directly they lost their civil employment. We believe that if commanding officers would keep the local, civil, and police officers fully informed of the number of reservists available for civil duty in each district, a large number of reserve soldiers would always find employment in the civil department, for the reservists will generally be more regular in their conduct, and more amenable to discipline than men taken from the ordinary civil population. We strongly recommend that the local Governments be urged to employ reservists as much as possible, for such employment will tend greatly to increase the popularity of service in the Native army.†

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* This is the number of the regiments of increased strength which the Commission propose to retain exclusive of the Goorkhas and local corps.

† For papers regarding reserves and pension system, *see* Appendix XXXVII.

LENGTH of SERVICE of Native Officers, Non-Commissioned Officers, Rank and File of the Bengal Infantry, compiled from the Inspection Returns for 1882.

Regiments (all ranks).	Under 5 years' Service.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 32 years.	Over 32 years.	Total of all Ranks.
1st Native Infantry - -	304	177	141	76	8	4	3	3	
2nd „ - -	455	115	126	85	13	13	7	4	
3rd „ - -	176	293	138	96	26	15	8	–	
4th „ - -	312	70	261	112	36	7	–	–	
5th „ - -	301	154	152	92	–	2	1	3	
6th „ - -	271	152	150	128	9	10	2	1	
7th „ - -	301	148	132	99	24	5	1	–	
8th „ - -	346	109	112	116	7	3	2	1	
9th „ - -	330	159	151	76	–	6	–	2	
10th „ - -	388	169	79	50	15	16	2	4	
11th „ - -	307	188	89	141	4	–	4	1	
12th „ - -	332	218	96	96	2	3	3	3	
13th „ - -	377	148	103	52	2	4	1	1	
14th „ - -	457	–	125	137	61	6	4	–	
15th „ - -	189	180	138	73	9	3	–	2	
16th „ - -	286	233	87	65	26	5	1	–	
17th „ - -	301	159	152	107	33	5	3	1	
18th „ - -	328	194	158	76	10	9	1	–	
19th „ - -	332	185	125	39	14	8	4	–	
20th „ - -	233	314	93	54	8	2	1	1	
21st „ - -	285	166	122	100	20	4	–	1	
22nd „ - -	387	135	111	44	13	5	2	1	
23rd „ - -	195	185	188	61	91	11	–	1	
24th „ - -	348	167	85	48	27	18	3	4	
25th „ - -	258	233	125	59	13	10	6	1	
26th „ - -	373	210	100	27	28	2	2	1	
27th „ - -	316	168	137	52	34	2	1	–	
28th „ - -	308	166	118	45	33	12	–	–	
29th „ - -	315	194	95	51	37	10	1	–	
30th „ - -	319	178	126	54	17	4	4	1	
31st „ - -	409	126	91	55	9	3	2	–	
32nd „ - -	306	211	93	74	96	7	1	–	
33rd „ - -	281	190	104	133	24	4	1	1	
38th „ - -	582	56	37	15	7	1	–	–	
39th „ - -	305	209	159	37	14	2	3	2	
40th „ - -	386	128	132	94	10	14	1	1	
42nd „ - -	189	325	257	20	29	5	4	–	
43rd „ - -	280	219	105	231	21	11	1	–	
44th „ - -	346	194	187	35	27	4	1	1	
45th „ - -	240	184	189	70	5	5	1	1	
TOTAL - - -	12,754	7,109	5,169	2,784	862	260	82	43	29,063
Percentage - - -	43·88	24·46	17·78	9·57	2·96	·89	·28	·14	

LENGTH of SERVICE of the Native Officers, Non-Commissioned Officers, Rank and File of the Bengal Cavalry, compiled from the Inspection Returns of 1877.

REGIMENTS.	Under 5 years' Service.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	Over 40 years.	Total of all Ranks.
1st Bengal Cavalry - -	108	118	68	35	63	31	20	12	2	
2nd „ - -	71	102	105	52	53	32	25	16	2	
3rd „ - -	191	104	59	79	10	4	5	4	–	
4th „ - -	135	83	99	88	22	15	9	4	–	
5th „ - -	192	105	78	53	12	10	4	2	1	
6th „ - -	159	119	75	75	11	7	11	1	–	
7th „ - -	72	93	115	104	53	19	8	–	–	
8th „ - -	211	107	48	38	26	19	1	–	–	
9th „ - -	39	117	95	93	44	39	23	3	–	
10th „ - -	142	125	85	84	7	2	4	–	–	
11th „ - -	163	119	87	72	6	1	–	–	–	
12th „ - -	170	101	66	103	7	6	4	–	–	
13th „ - -	117	125	66	123	11	8	3	3	–	
14th „ - -	136	110	121	82	4	3	4	1	–	
15th „ - -	116	115	90	88	15	29	4	–	–	
16th „ - -	135	137	83	84	4	10	–	–	1	
17th „ - -	186	74	44	111	33	3	2	3	1	
18th „ - -	173	135	67	53	15	4	9	1	–	
19th „ - -	105	142	106	67	21	11	6	–	–	
TOTAL - - -	2,621	2,131	1,557	1,484	417	235	142	50	7	8,662
Percentage - -	30·25	24·60	17·97	17·13	4·81	2·92	1·63	·57	·08	

LENGTH of SERVICE of Native Officers, Non-Commissioned Officers, Rank and File of the Bombay Army, compiled from the Inspection Returns for 1882.

REGIMENTS.	Under 5 years' Service.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	Over 35 years.	Total of all Ranks.
1st Cavalry - - -	120	83	93	109	33	28	13	-	
2nd „ - - -	177	104	58	70	53	18	9	-	
3rd „ - - -	190	85	90	47	38	18	9	-	
Poona Horse - - -	150	102	66	87	47	27	14	1	
1st Sind Horse - - -	186	123	148	46	32	10	3	-	
2nd „ - - -	107	91	145	82	62	30	7	-	
1st Infantry - - -	438	91	89	32	17	8	4	-	
2nd „ - - -	190	192	126	33	61	40	3	-	
3rd „ - - -	205	193	154	40	63	19	6	-	
4th „ - - -	454	134	95	84	51	20	3	-	
5th „ - - -	275	253	81	61	77	47	2	-	
6th „ - - -	264	157	135	53	29	11	2	-	
7th „ - - -	245	137	126	94	60	27	8	-	
8th „ - - -	460	167	128	45	42	27	1	-	
9th „ - - -	352	171	68	129	54	35	2	-	
10th „ - - -	345	206	101	73	16	14	-	-	
11th „ - - -	276	133	137	37	94	24	1	-	
12th „ - - -	223	107	161	118	31	22	1	-	
13th „ - - -	401	138	106	104	68	69	10	-	
14th „ - - -	198	150	139	63	70	46	6	-	
15th „ - - -	277	210	132	50	36	24	11	1	
16th „ - - -	369	130	172	36	38	21	1	-	
17th „ - - -	209	143	118	129	76	13	6	-	
18th „ - - -	254	167	123	64	51	26	5	-	
19th „ - - -	215	131	192	19	60	58	26	-	
20th „ - - -	252	146	105	123	48	15	1	-	
21st „ - - -	229	195	102	67	67	20	2	-	
22nd „ - - -	306	131	136	72	23	7	3	-	
23rd „ - - -	283	203	150	26	64	16	7	-	
24th „ - - -	375	180	190	68	16	7	4	-	
25th „ - - -	112	290	168	57	36	15	16	-	
26th „ - - -	255	166	177	19	22	46	10	-	
27th „ - - -	300	183	102	95	21	10	3	-	
28th „ - - -	256	120	176	86	28	20	15	-	
29th „ - - -	265	145	161	38	51	22	2	-	
30th „ - - -	444	130	83	17	9	-	-	-	
TOTAL - - -	9,657	5,487	4,523	2,368	1,644	863	216	2	24,760
Percentage - - -	39·002	22·16	18·26	9·56	6·63	3·48	·87	·008	

LENGTH of SERVICE of the Native Officers, Non-Commissioned Officers, Rank and File of the Bengal Infantry, compiled from the Inspection Returns of 1877.

REGIMENTS.	Under 5 years' Service.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	Over 40 years.	Total of all Ranks.
1st Regiment - -	333	220	83	40	12	16	5	1	3	
2nd „ - -	183	189	203	34	48	36	6	6	7	
3rd „ - -	253	149	148	46	48	32	25	7	3	
4th „ - -	348	133	135	41	21	6	4	3	1	
5th „ - -	213	247	222	9	9	2	4	2	2	
6th „ - -	180	211	253	16	11	15	4	3	–	
7th „ - -	190	138	238	99	18	8	5	1	–	
8th „ - -	220	149	281	22	13	10	4	3	1	
9th „ - -	239	235	155	6	33	22	14	4	2	
10th „ - -	366	118	133	20	32	9	1	5	–	
11th „ - -	225	150	269	5	27	4	4	10	1	
12th „ - -	257	235	87	48	24	14	5	3	–	
13th „ - -	292	201	181	13	11	7	2	1	1	
14th „ - -	240	202	198	23	9	7	6	–	–	
15th „ - -	272	192	186	46	6	4	5	1	–	
16th „ - -	208	170	150	162	12	5	–	2	1	
17th „ - -	236	213	221	10	7	7	6	6	1	
18th „ - -	293	209	123	23	24	8	7	5	1	
19th „ - -	235	205	96	41	26	7	2	–	–	
20th „ - -	261	274	133	34	6	2	–	–	1	
21st „ - -	315	173	99	94	2	7	–	1	–	
22nd „ - -	254	193	177	40	16	7	2	1	–	
23rd „ - -	185	269	110	112	1	2	–	1	–	
24th „ - -	324	141	93	78	38	9	2	–	–	
25th „ - -	286	199	102	71	31	13	1	–	1	
26th „ - -	338	144	59	121	24	4	–	–	–	
27th „ - -	298	170	140	90	6	5	1	–	–	
28th „ - -	261	187	94	114	31	4	4	–	–	
29th „ -	349	129	113	85	21	5	–	–	–	
30th „ - -	208	295	91	69	18	11	–	–	–	
31st „ - -	254	266	122	53	6	4	1	1	–	
32nd „ - -	243	150	70	233	7	4	–	1	–	
33rd „ - -	243	145	224	85	7	3	–	1	–	
34th „ - -	230	188	190	85	3	1	2	2	–	
35th „ - -	266	155	204	47	7	5	1	–	–	
36th „ - -	305	178	170	36	3	2	–	–	–	
37th „ - -	287	161	168	87	3	2	2	2	–	
38th „ - -	330	113	123	83	4	4	5	2	1	
39th „ - -	305	234	64	73	6	8	1	–	–	
40th „ - -	217	131	226	87	6	2	2	2	–	
41st „ - -	264	239	137	56	2	3	–	–	–	
42nd „ - -	397	166	214	89	14	8	3	2	1	
43rd „ - -	354	173	283	50	29	10	7	1	1	
44th „ - -	308	295	86	149	15	1	6	4	–	
45th „ - -	313	250	97	25	24	–	1	–	–	
1st Goorkhas - -	220	157	104	68	72	41	21	9	1	
2nd „ - -	189	137	85	190	46	18	26	15	4	
3rd „ - -	211	274	88	119	28	7	1	5	4	
4th „ - -	246	140	191	124	6	7	2	1	–	
TOTAL - -	13,044	9,292	7,419	3,342	873	418	200	114	38	34,740
Percentage - -	37·54	26·74	21·35	9·62	2·51	1·20	·57	·32	·10	

— No. 6. —

TELEGRAM from Viceroy, dated 20 March 1885.

Yours, 16th. My military advisers entirely concur in your suggestion, that it would be better to add second battalions to present strength of Goorkha regiments.

— No. 7. —

DESPATCH from the Government of *India* (No. 63 of 1885, Military Department) to the Secretary of State for *India*.

My Lord, Simla, 4 May 1885.

IN the Viceroy's telegram of the 30th March 1885, a proposal was made to increase the strength of the Native Army. We now beg to forward our detailed proposals on the subject.

2. First, as regards the cavalry. The cavalry regiments of the Bengal Army and Punjab Frontier Force have a present strength of 550 natives of all ranks. It is proposed to bring these regiments up to a strength of 625 natives of all ranks, and to add a fourth squadron, involving an addition of 75 of all ranks per regiment; 24 of these being native officers and non-commissioned officers, and 51 privates. The present and proposed composition of these regiments is shown in the annexed schedule A.

3. The Bombay cavalry regiments have at present the same total strength as the Bengal regiment, namely, 550 of all ranks, but a somewhat larger proportion of non-commissioned officers and smaller number of privates. It is proposed to raise these regiments also to 625 of all ranks organised in four squadrons, with an increase of 20 non-commissisoned officers and 55 privates, as shown in schedule B.

4. We recommend that a fourth squadron commander be appointed to all these regiments. This will increase the establishment of European officers, including the medical officer, from nine to ten.

5. The two regiments of Central India Horse are at present somewhat weaker in strength than the Bengal and Bombay regiments, having a total strength of 493 natives of all ranks. It is proposed to augment them to the same strength as the latter, which involves an increase of 24 non-commissioned officers and 108 privates, or 132 in all, as shown in schedule C. A fourth squadron commander would be added to these regiments also, giving them a total establishment of eight instead of seven British officers.

6. The four regiments of Madras cavalry are on a much smaller footing, comprising only 387 natives of all ranks. We propose to increase these regiments by six non-commissioned officers and 96 troopers, or 102 in all, bringing them up to a total of 489 of all ranks, to be organised as at present in three squadrons. The present and proposed establishment are shown in schedule D.

7. In addition to the increase above detailed, we consider it desirable to raise also three new regiments of cavalry, the Indian army being comparatively weak in that arm. We would propose that two of these regiments should be raised in Bengal and one in the Bombay Presidency.

8. The total augmentation to the cavalry under these proposals will amount to 4,572 natives of all ranks, bringing up the establishment from 17,384 to 21,956, as shown in schedule E.

9. An estimate of the cost of the augmentation, amounting to 23,49,727 rupees per annum, is attached, schedule F. To this must be added the cost of 56 European officers—* 29 added to the Bengal, Punjab, and Bombay regiments and the Central India Horse, and 27 for the three new regiments. This involves a charge of 436 rupees per mensem for each officer in the first instance. But as under the Staff Corps system the substantive promotion of officers is independent of regimental advancement,

* Bengal Cavalry	17
Punjab Frontier Force	4
Bombay	6
Central India Horse	2
Total	29

advancement, the effect of the augmentation must be to add eventually to the number of senior officers in the army; and, considering also the prospective charges for pensions and furloughs, the virtual cost of such an augmentation is considerably more than this, although it is not practicable to state the precise amount.

11. With respect to the infantry of the Indian Army, it is not proposed to make any change in the existing organisation of eight companies per regiment; but we desire your Lordship's authority to increase the regiments of the Bengal, Bombay, and Madras armies and the Punjab Frontier Force, other than the Goorkha regiments which are referred to below, from 832 to 1,000 natives of all ranks, an addition being made of one havildar and one naik per company, or 16 non-commissioned officers in all and 152 privates. The present and proposed establishment of a regiment of native infantry is given in schedule G.

12. The establishment of the 42nd, 43rd, and 44th Bengal Infantry is already 1,112 natives of all ranks. It is not proposed to alter this.

13. As regards the five Goorkha regiments, their present establishment is also 1,112 natives of all ranks. Your Lordship in a telegram, dated 12th March 1885, authorised an increase of 200 men to each of these, and also to the three Assam regiments which contain a large Goorkha element; and orders were issued accordingly.* But subsequently, in accordance with your Lordship's suggestion, it was decided that the augmentation of the Goorkhas should take the form of second battalions to the five Goorkha regiments. We attach correspondence with the Adjutant General upon the subject, from which it will be seen that, in view of the difficulty which may be experienced in obtaining a large number of Goorkhas, it has been decided to raise in the first instance a second battalion for the 1st Goorkha Regiment only, and not to make even this addition until the progress of recruiting is sufficient to justify the augmentation.

* Letter to Adjutant General in India, No. 263-B., dated 13th March 1885.
Telegram from Secretary of State, dated 16th March 1885.

To Adjutant General in India, No. 169-M-R., dated 31st March 1885.
From Adjutant General in India, No. 2485, dated 8th April 1885.
To Adjutant General in India, No. 361-M-R., dated 9th April 1885.

From Adjutant General in India, No. 830-B. dated 15th April 1885.
To Adjutant General in India, No. 187-Q-B., dated 20th April 1885.
From Adjutant General in India, No. 2377-Camp, dated 4th April 1885.
To Adjutant General in India, No. 354-M-R., dated 8th April 1885.

14. We attach a statement, schedule H., which shows the present and proposed establishment of infantry in accordance with these recommendations. It will be seen that the total augmentation for 105 regiments will be 17,608 men, thus raising the infantry of the Indian Army from 96,288 to 113,896 men, including the Goorkha and Assam regiments. The estimate of the cost of the additional infantry proposed, amounting to 31,20,500 rupees per annum (*vide* schedule I.), is attached, which has been framed on the assumption that the Goorkha regiments remain at their present strength, as the extent to which an augmentation of them may be possible is at present a matter of uncertainty.

Bengal, excluding Goorkha and Assam regiments	37
Punjab Frontier Force, excluding Goorkha regiment	10
Madras	32
Bombay	26
Total	105

15. The augmentation of the whole army will be as follows:—

	Present.	Proposed.	Increase.
Cavalry	17,384	21,956	4,572
Infantry	96,288	1,13,896	17,608

16. It was observed in the Viceroy's telegram of the 30th March, that this form of augmentation to the infantry would admit of an easy reduction should circumstances justify. It will be understood that this is a war measure called forth by the present aspect of affairs, and that, with the exception of the increase of establishment for the cavalry mentioned in the third, fourth, and seventh paragraphs of the Despatch, it is not intended to be permanent, but will be

be subject to further consideration when the present emergency has passed away.

17. The total annual increased cost of these proposals, exclusive of the charge for 56 additional officers for the cavalry, is—

	Rs.
Cavalry - - - - - - -	23,49,727
Infantry - - - - - - -	31,20,500
Total - - -	54,70,227

We have, &c.
(signed) *Dufferin.*
D. M. Stewart.
T. F. Wilson.
C. P. Ilbert.
S. C. Bayley.
T. C. Hope.
A. Colvin.

Enclosure in No. 7.

SCHEDULE (A.)

Establishment of a Regiment of Bengal and Punjab Cavalry.

	Present.	Proposed.
European Officers:		
Commandant - - - - - - - -	1	1
Squadron Commanders - - - - - - -	3	4
Squadron Officers - - - - - - - -	4	4
Medical Officer - - - - - - - -	1	1
Total - - -	9	10
Natives:		
Ressaldars - - - - - - - - -	3	4
Ressaidars - - - - - - - - -	3	4
Woordie-Major - - - - - - - -	1	1
Jemadars - - - - - - - - -	6	8
Kote Duffadars - - - - - - - -	6	8
Duffadars - - - - - - - - -	48	64
Trumpeters - - - - - - - - -	6	8
Privates - - - - - - - - -	477	528
Total - - -	550	625
Strength of one squadron - - - - - -	183	156
Increase:		
Officers and non-commissioned officers - - - - - - -		24
Privates - - - - - - - - - - - -		51
Total - - -		75

SCHEDULE (B.)

Establishment of a Regiment of Bombay Cavalry.

	Present.	Proposed.
European Officers	9	10
Natives:		
Ressaldars	3	4
Woordie-Major	1	1
Ressaidars	3	4
Jemadars	6	8
Kote Duffadar Major	1	1
Farrier Major	1	1
Kote Duffadars	6	8
Duffadars	30	32
Trumpeters	6	8
Naiks	30	40
Sowars	463	518
Total	550	625
Strength of one squadron	182	154
Increase:		
Officers and non-commissioned officers		20
Privates		55
Total		75

SCHEDULE (C.)

Central India Horse, two Regiments.

	Present.	Proposed.
European Officers:		
Squadron Commanders	3	4
Squadron Officers	3	3
Medical Officer	1	1
Total	7	8
Natives:		
Ressaldars	3	4
Ressaidars	3	4
Woordie-Major	1	1
Jemadars	6	8
Kote Duffadars	—	8
Duffadars	54	64
Trumpeters	6	8
Sowars	420	528
Total	493	625
Strength of a squadron	164	156
Increase:		
Officers and non-commissioned officers		24
Privates		108
Total		132

SCHEDULE (D.)

Madras Cavalry.

	Present.	Proposed.
European Officers:		
Commandant	1	1
Squadron Commanders	3	3
Squadron Officers	4	4
Medical Officer	1	1
Total	9	9
Natives:		
Subadars	6	6
Jemadars	6	6
Havildar Major	1	1
Havildars	30	30
Naiks	24	30
Trumpet Major	1	1
Trumpeters	6	6
Farrier Major	1	1
Farrier Havildars	6	6
Shoeing-smiths and pupils	6	6
Troopers	300	396
Total	387	489
Strength of a squadron	129	163
Increase:		
Non-commissioned officers		6
Troopers		96
Total		102

SCHEDULE (E.)

Cavalry, Indian Army—Present and Proposed Establishment.

	Establishment of One Regiment.		Increase per Regiment.	Number of Regiments.	Total Increase.	TOTAL.	
	Present.	Proposed.				Present Strength.	Proposed Strength.
Bengal Cavalry	550	625	75	17	1,275	9,350	10,625
Punjab Frontier Force	550	625	75	4	300	2,200	2,500
Bombay	550	625	75	6	450	3,300	3,750
Central India Horse	493	625	132	2	264	986	1,250
Madras	387	489	102	4	408	1,548	1,956
Three Cavalry Regiments (new)	-	625	-	3	1,875	-	1,875
TOTAL	-	-	-	36	4,572	17,384	21,956

SCHEDULE (F.)

Probable Annual Cost of the Augmentation of Native Cavalry Regiments, Bengal, Madras, Bombay, Punjab Frontier Force, and Central India Horse.

		Rs.
The annual cost of augmenting the strength of a Native Cavalry regiment, Bengal and Punjab Frontier Force, by one squadron, or 75 men of all ranks per regiment, would be 36,300 rupees; and for the 17 Bengal and the four Punjab regiments, or in all 21 regiments, the total cost would be		7,62,300
The annual cost of augmenting the strength of a Bombay Cavalry regiment by one squadron, or 75 men of all ranks per regiment, would be 36,900 rupees, and for the six regiments the total cost would be		2,21,400
The annual cost of augmenting the strength of a regiment of Central India Horse by one squadron, or 132 men of all ranks per regiment, would be 58,400 rupees, and for the two regiments the total cost would be		1,16,800
The annual cost of increasing the strength of a Madras Cavalry regiment by 102, or to a total of 489 of all ranks, would be 50,100 rupees, and for the four regiments the total cost would be		2,00,400
The annual cost of three new regiments of the increased strength proposed would be		10,48,827
TOTAL Annual Cost of Augmentation of Native Cavalry Regiments in India	*Rs.*	23,49,727

SCHEDULE (G.)

Establishment of a Regiment of Native Infantry.

	Present.	Proposed.
Subadars	8	8
Jemadars	8	8
Havildars	40	48
Naiks	40	48
Drummers	16	16
Privates	720	872
TOTAL	832	1,000

[The regiments of the Madras Army have one havildar more than the above.]

Number of Regiments of Native Infantry.

Bengal (excluding Goorkha and Assam)	37
Punjab Frontier Force	10
Madras	32
Bombay	26
TOTAL	105

Present strength—	
105 regiments, at 832 (plus one extra havildar in Madras regiments)	87,392
8 Goorkha and Assam regiments, at 1,112	8,896
TOTAL	96,288
Proposed strength—	
105 regiments, at 1,000	105,000
8 Goorkha and Assam regiments, at 1,112	8,896
TOTAL	1,13,896
INCREASE	17,608

SCHEDULE (H.)

Strength of Infantry Regiments.

PRESIDENCY.	Number of Regiments.	Establishment of one Regiment.		Increase per Regiment.	Total Strength of Corps.	
		Present.	Proposed.		As at Present.	As Proposed.
BENGAL.						
Bengal Infantry - - - - - -	37	832	1,000	168	30,784	37,000
Punjab Frontier Force (including Guides Corps Infantry) - - - - - -	10	832	1,000	168	8,320	10,000
Goorkha and Assam regiments - - -	8	1,112	1,112	- -	8,896	8,896
TOTAL - - -	55	- -	- -	- -	48,000	55,896
MADRAS.						
Native Infantry - - - - - -	32	833*	1,000	167	26,656	32,000
BOMBAY.						
Native Infantry - - - - - -	26	832	1,000	168	21,632	26,000
GRAND TOTAL, INDIA - -	113	- -	- -	- -	96,288	1,13,896
				Increased Strength - - -		17,608

* Including one extra havildar.

SCHEDULE (I.)

Probable Annual Cost of the Augmentation of Native Infantry Regiments.

	Rupees.
The annual cost of augmenting the strength of a regiment of Native Infantry, Bengal, by 168 men, or to a total of 1,000 of all ranks, would be 27,900 rupees, and for the 37 regiments the total cost would be -	10,32,300
The annual cost of augmenting the strength of a regiment of Native Infantry, Punjab Frontier Force, by 168 men, or to a total of 1,000 of all ranks, would be 25,200 rupees, and for the 10 regiments (including Guides Corps, Infantry) the total cost would be - - - - - -	2,52,000
The annual cost of augmenting the strength of a regiment of Madras Infantry by 167 men, as above, would be 31,300 rupees, and for the 32 regiments the total cost would be - - - - - - - -	10,01,600
The annual cost of augmenting the strength of a Bombay Infantry regiment by 168 men, as above, would be 32,100 rupees, and for the 26 regiments the total cost would be - - - - - - - -	8,34,600
TOTAL Annual Cost of Augmentation of Native Infantry Regiments - - - - - - *Rs.*	31,20,500

— No. 8. —

EXTRACT from MILITARY DESPATCH from the Government of India, No. 69, dated 4 May 1885, paragraph 22.

22. THE increase proposed in the Indian Army, European and Native, will form the subject of separate letters. We may mention here that we have allowed Native Regiments in the three Presidencies to recruit at once, to replace the men who have been invalided, but who will not be struck off before the 1st May. * * *

— No. 9. —

(Military, No. 117.)

DESPATCH from the Secretary of State for India to the Governor General of India in Council.

India Office,
London, 7 May 1885.

My Lord,

WITH reference to the telegraphic correspondence noted in the margin,* I now communicate to your Lordship's Government the formal sanction of Her Majesty's Government to the number of guns with the four Punjab and the two Bombay Native Mountain Batteries being raised to six, and to the addition of second battalions to the present strength, as fixed in G. G. O., No. 594 of 1882, of the existing five Goorkha regiments.

I have, &c.

(signed) *Kimberley.*

* *From Viceroy, 12th March.*

"We desire your authority to complete the four Punjab and two Bombay Native Mountain Batteries to six guns, and to add 200 men to each of the eight Goorkha regiments."

To Viceroy, 12th March.

"Yours, 12th. Mountain Batteries and Goorkha regiments. I approve."

From Viceroy, 13th March.

"I am inclined to ask you to allow us to raise three additional Goorkha regiments."

To Viceroy, 16th March.

"If you can bear expense, additional Goorkhas seem to me very desirable. If the three regiments are to be additional to the 200 men for the eight regiments, would it not be better to add second battalions of present strength to five regiments?"

From Viceroy, 20th March.

"Yours, 16th. My military advisers entirely concur in your suggestion that it would be better to add second battalions to present strength of Goorkha regiments."

— No. 10. —

INDIA ARMY CIRCULAR, 20 June 1885 [Clause 76].

NATIVE ARMY.

Augmentation of the Punjab and Bombay Native Mountain Batteries from Four to Six Guns.

(Applicable to the Bengal and Bombay Presidencies.)

[Issued as a Special India Army Circular on the 20th June 1885.]

WITH the sanction of the Secretary of State for India, the number of guns with the four Punjab and the two Bombay mountain batteries is raised from four to six, with effect from the 13th March 1885.

— No. 11. —

TELEGRAM to Viceroy, dated 29 June 1885.

YOUR Military Letter, 69, 4th May 1885, paragraph 22. When may separate letter regarding European increase to Indian Army be expected? Is the proposal for permanent?

— No. 12. —

TELEGRAM from Viceroy, dated 1 July 1885.

YOUR telegram of 29th June. Our Military Despatch, No. 69. With the exception of the increase to the native cavalry, which was intended to be permanent, all our proposals in the foregoing Despatch were framed to meet the then impending exigencies of war. We will shortly forward a second Despatch dealing with the changes we consider necessary in the number and organisation of the army in India, both Native and European. They will possibly contain a suggestion for a certain permanent increase in the number of both branches.

— No. 13. —

TELEGRAM from Viceroy, dated 2 July 1885.

MY Military Despatch, No. 63, of the 4th May, Native Army, paragraph 16. For the cavalry mentioned in the 3rd and 4th paragraphs of the Despatch read in the 3rd, 4th, and 7th paragraphs of this Despatch.

— No. 14. —

TELEGRAM from Viceroy, dated 4 July 1885.

MY telegram of 1st July, referring to Military Despatch, No. 69. For "European Cavalry," read "Native Cavalry."

— No. 15. —

TELEGRAM from Viceroy, dated 7 July 1885.

MY Military Despatch, No. 63, of 4th May last, Native Army. Please await further proposals regarding infantry in modification of arrangements therein proposed, which were provisional only to meet emergency of war; but we should be glad to receive early sanction to proposals for cavalry, in which no change is proposed. Raising and equipping fourth squadron, and procuring horses, must in any case be a work of time.

—No. 16. —

TELEGRAM to Viceroy, dated 7 July 1885.

YOUR Military Letter, 44, dated 17th March 1885, Native Army Reserve, paragraph 9. I do not approve of proposal to form territorial reserve battalions, but cordially accept the alternative system of long furlough men, and authorise your taking immediate steps for giving effect.

— No. 17. —

TELEGRAM from Viceroy, dated 22 July 1885.

YOURS, 7th, Native Army Reserve. Will despatch follow; if so, when may we expect it?

— No. 18. —

TELEGRAM to Viceroy, dated 23 July 1885.

YOURS, 22nd, Native Army Reserve. Despatch leaves 24th July or to-morrow.

— No. 19. —

(Military, No. 192.)

DESPATCH from the Secretary of State for India to the Governor General of India in Council.

My Lord, India Office, London, 23 July 1885.

1. I HAVE received and considered in Council your Lordship's Military Letter No. 44, dated 17th March 1885, regarding the formation of a reserve for the Native Army.

2. Your Government propose, before elaborating a complete scheme for the purpose, to make the experiment in the first instance on a small scale, in view of its future extension should it prove successful Your Lordship considers that there are two ways in which the experiment might be carried out.

First, according to the method proposed by the Simla Army Commission, under which the men passed into the reserve would still belong to their respective regiments, and would rejoin them when called out, the men sent to their homes being limited to 250 per regiment and considered as on long furlough, but liable to be called up for training once a year, or once every two years, receiving pay while under training, and a gratuity for each month of such training after it is over, either at the end of each training, or at the end of their reserve service.

The second method proposed is to make the reserve territorial in character. Under this system the men passed into the reserve would not belong to any particular regiment, but would be called up and form a battalion to be stationed at some place near their homes, it being understood that the reserve battalion would be required only for duty in India, and would not be required to go on foreign service. The men of the reserve battalion should, it is proposed, be called out for 30 days' duty once a year, receiving a gratuity of 24 rupees at the expiration of it. Each reserve battalion to have native officers and non-commissioned officers on the same scale as the regular army, who would be chosen from the reserve list, or from efficient pensioners. The command to be vested in a British officer on 200 rupees a month staff, who would be assisted by an adjutant, while a small native staff would be maintained for the custody of the arms, clothing, &c., of the battalion.

3. Your Government are disposed to recommend that each of these methods should have a trial, and wish for authority to apply the first or "long furlough" system to about 10 regiments of the Bengal Army in the first instance, and to form one or two reserve battalions on the second plan.

4. I agree with your Lordship's Government as to the expediency of introducing some system of reserve for our native army, in order to enable the effective strength of its regiments to be rapidly increased on an emergency, and I am quite prepared to authorise the adoption of measures for furthering this object.

5. I am, however, of opinion that, in establishing any system of reserves, it should be considered an essential condition that it shall provide for the immediate strengthening of corps proceeding on service, and I also think that it should, if practicable, be so constituted as to afford the means for keeping their ranks supplied while they continue in the field.

 6. The

6. The proposed formation of reserve battalions does not, as your Lordship points out, meet either of these conditions, and, in my judgment, the utilisation of the battalions in garrison with the consequent release of a corresponding number of regular regiments for employment on active service, would not compensate for this serious defect. But even allowing for the advantage arising from the larger number of regular troops that might thus be placed at the disposal of the Commander in Chief, certain other objections present themselves in considering the proposed organisation of reserve battalions, to which I desire to draw your Lordship's attention.

7. The battalions, I observe, are to be formed entirely of men who will have no necessary regimental connection with each other, but all of whom will be bound by a common territorial tie. They will not be liable for employment elsewhere than in their own territory, that is to say, they will be employed solely in maintaining order at home. The only occasions on which the battalions would be called out would be when under peculiar stress of war the regular troops had to be withdrawn from those positions which it is a matter of military and political obligation to hold, and the active services of the men would probably be only called into play for the suppression of disturbances amongst the people of their own villages and towns. In the event of any reverses befalling the regular forces in the field, the reserve battalions would not only be unable to afford any active support to the troops engaged, but would themselves be specially liable to be affected by any disturbing influences at work in their districts, and might thus, at a critical period and at important strategical points, be a source of anxiety rather than of strength.

8. For a battalion so constituted and employed it would be obviously necessary that its commissioned officers, both British and Native, should be selected with great care and with special regard to their knowledge of the men, but this does not seem to me to have been provided for, or indeed to be possible under the organisation proposed.

9. That organisation gives a commandant on a scale of staff salary which would only be suitable to a very junior officer, who would be assisted by an adjutant who must necessarily be a still younger officer, while no arrangement is made for the officering of the battalion when embodied for garrison duty. It would be necessary, therefore, to draw on the regular regiments for the needful supply of officers when they could least conveniently be spared, and, moreover, such a mode of officering the battalion would be most unsatisfactory at a critical time when it would be specially desirable that officers should know and have personal influence over the men, and the men know and trust the officers. The same objection is at least as applicable in the case of the Native commissioned and non-commissioned officers of companies.

10. Neither, in my opinion, would the proposed staff of two officers be sufficient for the annual training, even on the assumption that only the men of the reserve battalion were present. It is, however, proposed that not only these men, but that long furlough men shall also, under certain circumstances, join the local battalion for the annual training, thereby greatly increasing, and perhaps even doubling, the enrolled strength of the battalion, and making it impossible for the allotted staff to exercise that careful supervision over the training which is essential in the case of men called out for only four weeks in the year. In raising this objection, I do not overlook the fact that all the men need not go through their annual training at the same time, but practically I believe it would be found that the attendance could not be spread over many months of the year, for if the reserve system is to be made really attractive, it will be needful that the reservists, the great bulk of whom will be agriculturists, shall only be called up at those seasons which will interfere the least with their pursuits.

11. I am apprehensive, therefore, that in practice it would be found necessary to add largely to the staff proposed for these battalions, with the consequence that, while the expense of maintaining them would be very considerable, they would not be thoroughly efficient in themselves, while they would at the same

time fail altogether to meet one of the main essentials to be kept in view in establishing any system of army reserves.

12. In referring to this question of expense, I would point out that the charge for the staff and the establishments permanently maintained would be an absolute addition to the regular military estimates, and though this would be comparatively trifling if it were confined to the one or two battalions now proposed, it would amount to a very material increase to the estimates if the system were to be generally introduced. I am, of course, aware that any scheme for providing a reserve must involve additional expense, but, in view of the probably increasing requirements for the military defence of India, it should be regarded as an essential condition that no expenditure shall be incurred on any measure which does not afford reasonable expectation that it will secure the greatest results at the least cost.

13. The alternative, or "long furlough" scheme proposed by your Lordship's Government appears free from either of these objections. It provides for an immediate addition of 250 trained men to each regiment ready to fall at once into their accustomed place in its ranks. The mode thus suggested for speedily placing regiments on a war footing is apparently not only easy of application but probably the most efficient and economical manner in which this essential object can be attained.

14. While, therefore, for the reasons already stated, I am unable to accord my sanction to the creation of "reserve battalions," I have, on the other hand, great pleasure in expressing my entire concurrence in the alternative or "long furlough" system, and in authorising your Lordship's Government to give effect to it to such an extent as you may decide.

15. Doubtless your Lordship has already considered the several points of detail connected with the introduction of this measure, and I shall be glad to be favoured with a full report of the conditions and method under which your Government may decide that the long furlough men shall be paid, the earliest date after enlistment at which they will be permitted to elect for the reserve, the period for which their service on it will be allowed to continue, and the arrangements for the maintenance and custody of the arms, clothing, and equipment during the time when the men are not under their yearly training.

16. There is a further point as to which I am anxious to learn the intentions of your Government, viz., the arrangements for the training of the reserve or long furlough men. This question appears to me to present many practical difficulties which, perhaps, I need hardly point out to your Lordship, but I desire to take this opportunity of stating that should such difficulties arise I shall be glad to give full consideration to any measures for obviating them, whether by forming regiments of multiple battalions, or other system which your Government may desire to recommend.

I have, &c.
(signed) *Randolph S. Churchill.*

— No. 20. —

EXTRACT from a DESPATCH from the Government of India, No. 121, dated 24th July 1885.

Paragraph 15. Correspondence and India Army Circular showing that we have sanctioned the entertainment of 20 supernumeraries in every Native Infantry regiment, Goorkha and Assam excepted, to allow for the waste which takes place by casualties before recruiting can be made. Military Department letter, No. 474-B., dated 18th July 1885.

The returns show that for years past the Native armies have been on an average 2,000 below strength. The measure now sanctioned will help to maintain the army at its established strength, and ensure the presence at head-quarters of regiments of a larger number of trained men, thus making them more efficient for service.

[*The reply, or rather acknowledgment, to the above, is paragraph* 38 *of No.* 297, *of* 29*th October* 1885.]

Enclosures in No. 20.

(No. 474-B.—Government of India.—Military Department.)

To the Adjutant General in India.

Sir, Simla, 18 July 1885.

In forwarding, for the information of the Commander in Chief, the enclosed copy of an India Army Circular, about to be published, sanctioning the entertainment of 20 supernumeraries in Native Infantry regiments (Goorkha and Assam regiments excepted), I am to suggest that it be explained to commanding officers that the fixed establishment of a regiment has not been raised, and that it is not necessary that the 20 supernumeraries should be always kept complete. The supernumeraries might be entertained at the beginning of the year before the assembly of the annual invaliding board, and then be allowed to gradually diminish by casualties during the year. Special recruiting measures (*i.e.*, despatch of recruiting parties) should not be undertaken until a regiment is reduced by ordinary casualties to its fixed establishment.

I am, &c.
(signed) *Arthur Crvokshank*,
for Secretary to the Government of India.

[Applicable to the three Presidencies.]

Army Circulars, India, 1885.—[Clause 98.]

Government of India, Military Department,
Simla, 31 July 1885.

The following Regulations and Instructions are promulgated by direction of the Right honourable the Governor General in Council.

Organisation.—Native Army.

Entertainment of Supernumeraries in Native Infantry Regiments.

In view to maintaining the native armies as nearly as possible at their full established strength, and to provide a margin for casualties, officers commanding regiments of Native Infantry (Goorkha and Assam regiments excepted) are authorised to entertain supernumeraries to the extent of 20 sepoys per corps in excess of the establishment of 720 sepoys.

G. Chesney,
Secretary to the Government of India.

— No. 21. —

TELEGRAM to Viceroy, dated 4th August 1885.

YOUR Military Letter 63, of 4th May, and telegram 2nd July. I sanction your carrying out proposals for permanent cavalry increase.

— No. 22. —

TELEGRAM from Viceroy, dated 14th August 1885.

ARMY Despatch goes to-day; main proposals as follows: British troops, artillery additions, one horse, two field, two mountain, six garrison; total, 11 batteries, 1,373 men.

Cavalry: nine regiments to have each a fourth squadron; total, 1,332 men. Infantry, addition of 100 rank and file to existing 50 battalions, and three more battalions 984 strong; total, 7,952; total increase British Army, 10,657 men.

Native cavalry: no change in proposals of last May, which are already sanctioned by you, and in course of being carried out.

Native infantry: Bengal and Punjab infantry, 47 existing battalions to have 80 men more each, but to be raised to 980 in first instance, pending creation of reserve; five new Goorkha battalions proposed, three new Sikh battalions, one Muzbee pioneer battalion, each 912 strong; total permanent increase, 11,968 men.

Bombay infantry to have temporary increase of 80 men per regiment, pending formation of reserves. Madras infantry not increased.

Reserves to be, Bengal, 218; Bombay, 160; Madras, 160 per battalion; total, 23,232 men. Reserve pay, $3\frac{1}{2}$ rupees per month.

Native infantry to be linked in regiments of three battalions. This change prospective only. Sepoys who enlist henceforward to be liable for transfer to either of two other linked battalions. Various modifications proposed as regards pensions, good conduct pay, and also as regards Army administration, for which see Despatch. We have already received your authority to introduce system of linked battalions, because the two conditions, reserve and linking, form part of same measure to be dealt with as a whole. We also desire authority to begin the augmentation Bengal and Bombay infantry.

Ilbert and Colvin dissent from some of the proposals.

— No. 23. —

TELEGRAM from Secretary of State to Viceroy, dated 15th August 1885.

YOURS 14th August, Military. I understand proposed British increase to be permanent. Is this so?

— No. 24. —

TELEGRAM from Viceroy, dated 16th August 1885.

YOURS 15th August, Military. British increase. Yes.

— No. 25. —

(No. 135 of 1885.—Military Department.)

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Simla, 14 August 1885.

IN our Military Letter No. 112, dated 10th July, embodying our recommendations for the construction of certain defensive works and the extension of roads and railways on the north-west frontier, we stated that these would be followed by proposals for placing the Indian Army on a footing adapted to the new conditions which it may be called upon to meet. Till lately the functions of that army were limited to maintaining the internal peace of India, and to supplying small bodies of troops for foreign expeditions against adversaries possessing very limited resources. By the recent advance of Russia, the military problem with which the Government of India has to deal has been profoundly modified. We have now in close proximity to our frontier a great European power with which we may at any time be brought into hostile contact; and consequently our existing military establishments are no longer adequate for the duties they may have to fulfil. Though in any great emergency the Indian Administration might doubtless draw largely on the general support and resources of the Home Government and of the British nation as a whole, the existence of this potential reserve does not liberate us from the imperative obligation of increasing India's means of self-defence. We may be suddenly called upon to take measures for repelling or anticipating an attack, and the rapidity with which modern warfare is conducted renders it necessary that we should have ready at hand the troops, both British and Native, as well as the war material required. Nor would it be enough to keep in India merely a force sufficient for the preliminary stages of a campaign, and trust for the conduct of its subsequent operations to receiving aid from England; for, even assuming that a large number of regiments could be spared from home and colonial defence, and could be rapidly transported, without danger of interruption, to Bombay or Karachi, we could not supply them at such short notice with the necessary complement of Native troops. Neither could we prepare this complement long beforehand in view of such a contingency, because we should be thereby raising the proportion of Native to British troops above the figure which is regarded on all hands as the minimum consistent with safety. Considerations of economy on the one hand, and of security on the other, prevent us from garrisoning and defending India exclusively with British or exclusively with Native soldiers, and the necessity of maintaining a just equilibrium between the two has largely influenced our scheme. We have now the honour to submit the proposals to which, after full and anxious deliberation, we desire to obtain the sanction of Her Majesty's Government.

2. The attached letter from the Adjutant General contains the detailed recommendations of the Commander in Chief for the augmentation of the army; we proceed to discuss the subject under its different heads.

Appendix A. No. 2009, dated 3rd July 1885.

Establishment of British Troops in India.

3. First, as regards the establishment of British troops in India. His Excellency proposes that the numerical strength of the British Army in India should be augmented from its present establishment of about 59,000 of all ranks, exclusive of officers, to a total of about 75,000, or by 16,000 men.

The greater part of this increase of 16,000 men would, in Sir Donald Stewart's opinion, be most economically and advantageously provided by adding a fourth squadron to each regiment of cavalry now serving in India, each corps being raised from 454 to 602 of all ranks, excluding officers, and by increasing each battalion of infantry from 780 to 960 privates.

4. This

4. This measure, his Excellency observes, would give a total increase as follows:

Increase of one squadron of 148 men each to 9 regiments of cavalry (9 by 148)	1,332
Increase of 50 battalions of infantry by 180 men each (50 by 180)	9,000
Total	10,332

leaving a balance of 5,668 men to be provided by additional cadres from home which the Commander in Chief recommends should consist of the following units:—

1 regiment of cavalry		602
1 battery of horse artillery	157	
2 field batteries at 157	314	
4 garrison batteries at 115	460	
		931
4 battalions of infantry on the proposed strength of 1,064 men		4,256
Total		5,789

5. If these measures were adopted, the total increase to the establishment of British troops would be:—

Increase to cavalry now in India	1,332
Increase to infantry now in India	9,000
Increase by fresh cadres from home	5,789
Total	16,121

6. Taking the augmentation under the different branches of the service, it would be:—

Cavalry—		
Increase to 9 regiments now in India	1,332	
Additional (a 10th) regiment	602	
		1,934
Artillery—		
Additional batteries		931
Infantry—		
Increase to 50 battalions now in India	9,000	
Four additional battalions	4,256	
		13,256
Total		16,121

7. The Commander in Chief observes that the establishment he proposes would allow of 30,000 men being retained in India as garrisons for those strategical points which it is considered necessary to hold, and furnish 40,000 for active service, leaving a margin of 5,000 men to cover those deficiencies of actual strength as compared with establishment, which are almost certain occasionally to occur. In other words, while estimating for a nominal establishment of 75,000 men, his Excellency has in view that the actual strength of the British Army in India shall be not less, at any time, than 70,000 men effective.

8. The Commander in Chief offers an alternative proposal for obtaining the same augmentation in the event of the Government deciding that it is not advisable to increase the present establishment of regiments, and preferring that the whole increase should be in the form of fresh cadres to be brought out from home. In that case Sir Donald Stewart considers that the cadres should be as follows:—

4 regiments of cavalry at present strength (454)	1,816
15 battalions of infantry at present strength of 884 each	13,260
1 battery of horse artillery 2 batteries field artillery 4 batteries garrison artillery, as above	931
Total	16,007

9. We may at once say that even if Her Majesty's Government were prepared to furnish 15 more battalions of infantry and four regiments of cavalry for permanent service in India, this latter mode of obtaining the augmentation should not in our opinion be the one preferred. It would be extremely expensive, both in the annual charges which it would involve, and from the large expenditure that would be required for additional barracks. Moreover, the present strength of the British regiments in India, both cavalry and infantry, has been shown by experience to be much too small for an army, any portion of which may be called upon to take the field at short notice. The increase, whatever the amount of it may be, to be made to the establishment of British troops in India should, in our opinion, be mainly in the form of an increase to existing cadres, as being by far the most economical way of furnishing it, and also that which would most conduce to the efficiency of the Army.

10. In determining the extent of the augmentation to be made to the British Army in India, we have, as was indicated above, to consider to what extent that Army is entitled to count in time of emergency upon reinforcement from the home reserves. The Indian revenues contribute largely to the maintenance of the Army Reserve; and if this can be counted upon to augment the British troops in India, whenever the latter may have to take the field on a large scale, it appears unnecessary to maintain the regiments in India on quite the full establishment of rank and file proposed by the Commander in Chief. Judging from what took place a few months ago, when a part of the Reserve was actually warned, and was ready to be called out to proceed to India, we conclude that, if no great strain is placed on our military resources nearer home, we may count upon our battalions in this country being strengthened from that source, should extensive military operations have to be undertaken. But it may be necessary to take the field in strength at short notice; moreover, a condition of affairs might arise, short of actual war, yet creating the need for a larger force of British troops than could be furnished by the existing establishment, but for which the reserve would not be available. There is further to be considered the liability to interruption of communication with England, when the Government here might be left for a time to its own resources. We are therefore of opinion that while, in view of these considerations, it would not be justifiable to trust entirely to the home Reserves, some abatement may be made from the Commander in Chief's proposal for increasing the British Army by 16,000 men, and we have decided to recommend to Her Majesty's Government that the permanent establishment of British troops in India should be brought up from the existing establishment of about 59,000, excluding officers, to 70,000 men, being an increase of about 11,000.

11. The difference between our proposal and that of the Commander in Chief may, however, be considered as rather apparent than real. Sir Donald Stewart asks for a nominal establishment of 75,000 British troops, with the expectation that this may furnish an actual strength of not more than 70,000; and, judging from the serious deficiencies which have been suffered to occur in the establishment of late years, this expectation is not unreasonable. But we hope that in future her Majesty's Government will take adequate measures to ensure that the

the Indian establishment of British troops shall always be kept up to its full strength, whatever that may be; and our estimate of 70,000 men has been framed on this assumption.

12. It may be noticed here that the present establishment of 59,000 men is the smallest that has been maintained in this country at any time since the mutiny. The strength for each year from 1860 is given in the Appendix. It will be seen that as lately as 1864, when the internal peace of India only had to be provided for, there were nearly 70,000 British troops in India. Appendix B.

13. The next point is to determine in what form this increase should be supplied.

14. First, as regards the artillery. This is the only part of the British establishment which has of late years undergone reduction. In 1881, in pursuance of the recommendations of the Army Commission adopted by the Government of India, nine batteries were sent home; at the same time the garrison batteries retained were increased from 87 to 115 of all ranks, excluding officers; the net reduction was about 800 men.

15. The Commander in Chief now proposes, as a part of the augmentation which he recommends, an addition to the Indian establishment of:—

One horse battery,
Two field batteries,
Four garrison batteries.

16. His Excellency observes that this proposal is irrespective of the garrison artillery which may be required for the projected frontier defences. But we think it would be better in our present estimate to take the requirements of these frontier defences into account. One garrison battery at least should be provided for the proposed defensive position in Pishin, and another for the defensive position proposed in advance of Peshawar. In other respects the Commander in Chief's estimate, which provides additional garrison artillery for the improved and more extensive artillery defences now being provided at Karachi, Bombay, and the Hooghly, appears sufficient. The whole requirements for garrison batteries, present and prospective, may therefore be estimated at six, which it may be said provisionally would be stationed:—

One at the new position at Quetta.
One at the new position at Peshawar.
One at Karachi.
One at Bombay.
One at Fort William.
One in reserve at some convenient station to be fixed upon hereafter.

17. Next, as regards field artillery. The augmentation proposed by the Commander in Chief is nearly in the recognised due proportion of three guns per 1,000 men to the increase of British troops asked for, taking a garrison battery to represent six guns. But, as will be seen presently, we propose an increase of about 16,500 men to the Native Army, and a proportion of European artillery is required for that augmentation. The present number of field guns in India is 360, which for the existing Army, British and Native (exclusive of the contingents), about 177,000 strong, gives a proportion of little more than two guns per 1,000 men. The proportion generally recognised to be proper is three guns per 1,000 men. The whole of the Army, however, would not take the field; and if the garrison artillery be included as representing an equivalent to the portion of the Army remaining in reserve, then the present total number of guns may be taken at 504, or nearly three per 1,000 men. With the increase now proposed for the Army, we think that not less than five batteries, or 30 field guns, should be added, which is only at the rate of one gun per 1,000 men of the total augmentation proposed. These batteries might be one of horse, two of field, and two of mountain artillery.

 18. The

18. The total addition in artillery would therefore be—

1 battery horse artillery at 157		157
2 batteries field artillery at 157		314
2 batteries mountain artillery at 106		212
6 batteries garrison artillery at 115		690
11	Total	1,373

excluding officers.

19. Next, as regards the infantry. The Commander in Chief's proposals would bring up the strength of the British battalion in India to 1,064 of all ranks, excluding officers; and although such a battalion would certainly not be of a strength at all greater than is suitable for active service, still it would be strong enough to take the field in the first instance without being replenished from the reserves; and those battalions which in case of a campaign on the frontier remained to garrison India would also be at war strength. Having regard, then, to the two considerations which have been already enlarged upon, namely, the claim of India to draw upon the reserves, and, on the other hand, the possibility that circumstances might prevent this form of reinforcement from being immediately forthcoming, and, lastly, our desire, on financial grounds, to limit the augmentation to 11,000 men, we are of opinion that the establishment of the battalion in India should be fixed at something between its present figure of 868 of all ranks, excluding officers, and the establisment of 1,064 of all ranks proposed by the Commander in Chief. The Government of India in 1881, when reviewing the recommendations of the Army Commission with regard to the establishment of British troops, proposed that the strength of the rank and file of the battalion in India should be raised from 820 to 920 privates, which, they observed, was 30 less than the strength at that time fixed for the battalion first for service at home. An establishment of this strength, 984 of all ranks, excluding officers, would be very suitable for the general purposes of military duty in this country. It would also furnish reasonably strong battalions for active service in case of sudden emergency, while at the same time such an establishment would not assume that India would be left without the aid of the home reserves. For active service the battalion should be augmented by at least 150 men from that source, or brought up to a total strength of 1,134, which, when sick and absentees are deducted, would give perhaps 1,000 men effective with the colours wherewith to open the campaign.

Military Letter, No. 141, dated 24th April 1881.

20. This proposed augmentation of 100 rank and file per battalion gives a total increase of 5,000 men to the existing establishment of 50 battalions.

21. The Commander in Chief proposes the addition of a fourth squadron to the nine cavalry regiments now in the country. We concur in this recommendation, which gives an increase of 1,332 men.

22. We further concur with the Commander in Chief in considering that some additional battalions of British Infantry should be stationed in India, but we would limit the number to three instead of four. Of these, two will be required to occupy the new entrenched position in Pishin, and one for the position at Peshawar, in addition to the present garrison of that place.

23. We may observe that the arrangement above proposed for obtaining the desired increase of British troops will also be the most economical that could be made in respect of barrack accommodation. The fortified positions at Peshawar and Pishin must necessarily be provided with quarters for the garrison to hold them, and be occupied by troops, setting free barracks in other parts.* As regards existing barracks, the buildings for general purposes, canteens, guard room, staff quarters, &c., will be as suitable for battalions of 1,000 strong as for battalions of 900. The only additions necessary will be in the way of barrack rooms; but these are in many places in excess of existing wants, and by the needful redistribution of buildings and stations where necessary, the required accommodation can be obtained with a moderate outlay.

* One battalion has already been moved up from Bangalore, leaving the barracks at that place empty.

24. If

24. If the measures proposed above were adopted, the total increase to the British Army in India would be as follows:—

Cavalry—		
Addition of a fourth squadron to nine regiments		1,332
Artillery—		
1 battery of horse artillery at 157	157	
2 batteries of field artillery at 157	314	
2 batteries of mountain artillery at 106	212	
6 batteries of garrison artillery at 115	690	
11 Total Batteries.		1,373
Infantry—		
Increase of 100 men to 50 regiments	5,000	
Three additional battalions at 984	2,952	
		7,952
Total Increase		10,657

or nearly 11,000 men.

25. The total establishment would therefore be:—

Present Establishment	59,371
Addition as above	10,657
Total	70,028

exclusive of officers.

Native Army— Cavalry.

Military Letter No. 63, dated 4th May 1885.

26. First, as regards the cavalry. Our recommendations with respect to this branch have already been submitted, and have just been sanctioned by your Lordship,* but it may be useful to recapitulate them here.

* Telegram from Secretary of State of 4th August 1885.

27. The 17 regiments of Bengal Cavalry and four regiments of the Punjab Frontier Force Cavalry to be organised in four squadrons, and brought up to a total strength of 625 natives of all ranks, being an increase of 75 to the existing strength.

28. The two regiments of Central India Horse to be brought up to the same strength as the Bengal Cavalry Regiment, which will involve an increase of 132 of all ranks to their present establishment.

29. The six regiments of Bombay Cavalry to be brought up to the same strength as the Bengal Cavalry Regiment, namely, 625 of all ranks, involving an increase of 75 of all ranks to the present establishment.

30. The foregoing 29 regiments to have each an additional squadron officer, which will raise the establishment of British officers per regiment from eight to nine.

31. The four regiments of Madras Cavalry to be increased from their present strength of 387 natives of all ranks to a total of 489 natives of all ranks, organised, as at present, in three squadrons.

32. It is further proposed to raise three new regiments of cavalry, two in Bengal and one in Bombay, each on the new strength of 625 of all ranks. The Commander

Appendix A.

Paragraph 10 of the Adjutant General's letter, No. 2009-B., dated 3rd July.

Commander in Chief in India observes that it appears preferable to raise all three regiments in the Bengal Presidency, as the Commander in Chief, Bombay, has frequently reported that it is difficult to get men to enlist under the silladar system in that presidency, whereas in Bengal no such difficulties are experienced. The Bombay Army, however, is comparatively the weaker in cavalry, and we think that the difficulty referred to by his Excellency might be overcome, and a valuable purpose served, by raising one of the three new regiments to take the place of the 3rd Sind Horse, which was reduced in 1882, from the tribes on the Biluchistan frontier. The climate of that country, in which henceforward a considerable portion of the Indian Army must be permanently stationed, is unquestionably trying to the natives of India; and, both on political and military grounds, it appears desirable to follow up the policy which has hitherto been pursued of enlisting in the army the people of the country with whom, under the gradual advance of the British power, we have successively come in contact. We would therefore adhere to the proposal to give this third regiment to the Bombay Presidency.

33. The total augmentation to the cavalry under these proposals will amount to 5,072 natives of all ranks, which will bring up the establishment from the present strength of 17,384 to 22,456:—

17 regiments Bengal Cavalry.	
4 regiments Punjab Frontier Force Cavalry.	
21 regiments, each increased by 75 men - - - -	1,575
2 regiments Central India Horse, each increased by 132 men	264
6 regiments Bombay Cavalry, each increased by 75 men -	450
4 regiments Madras Cavalry, each increased by 102 men -	408
Increase to existing regiments - - -	2,697
3 new regiments, 2 in Bengal, 1 in Bombay, of 625 each -	1,875
Total - - -	4,572
The present establishment of cavalry is - - - -	17,384
Proposed augmentation - - - - - - -	4,572
Total proposed strength - - -	21,956

Native Infantry. Linked Battalions.

34. We now turn to the Native Infantry. The proposal submitted in the letter of May last, above quoted, regarding this branch of the service was simply for raising each regiment of the Indian Army from 832 to 1,000 natives of all ranks, by the addition of 168 non-commissioned officers and privates. It was stated that this increase was proposed as a special war measure, which was not intended to be permanent, but was to be subject to further consideration when the emergency which led to the proposal had passed away. That measure has not been carried out, and we now desire to substitute for it a proposal for the permanent re-organisation of the Native Infantry to replace the present organisation, which is confessedly adapted for Indian service only and the maintenance of internal tranquillity. Since that proposal was made, we have received your Lordship's authority* to introduce a system of reserves; but we have had under consideration at the same time, as part of a general scheme for strengthening the active army, the question of substituting for the present system of single battalion regiments one of regiments composed of two or more battalions. While the system of reserves admits of a regiment being retained in peace time on a small establishment, and brought up to a war establishment when necessary, this mode of augmentation operates only at the outset

* Telegram to Viceroy of 7th July 1885.

outset of a war; it does not afford the machinery for keeping the regiment up to its full strength. And undoubtedly under the present system of single battalion regiments having no connection with each other, a great source of strength is wasted. Under no circumstances is it conceivable that the whole Indian Army could be employed against a foreign enemy, but the regiments which remain in quarters afford no aid to strengthening the ranks of those in the field, except such as can be given by the uncertain and insufficient process of volunteering. We have no doubt, therefore, that a reorganisation of the infantry of the Native Army is necessary under the present circumstances, and we desire to obtain your Lordship's authority to set about introducing such a measure. The only doubtful point appeared to be whether the present infantry regiments should be reorganised in linked double battalions, or in regiments of three battalions. It will be seen that the Commander in Chief has submitted alternative proposals on this head, and on full consideration we have no hesitation in pronouncing in favour of the three-battalion system as the more flexible and generally convenient of the two. It may be mentioned that the Commander in Chief of the Bombay Army brought forward a proposal to this effect in 1882, when he pointed out that, under ordinary circumstances, it was not likely that the Bombay Army would be called upon to furnish more than one-third of its regiments for service beyond the frontier, in which case each battalion, under the proposed organisation, would have two battalions remaining in India to act as feeders to it. The Bombay Government have lately renewed the proposal. The same consideration applies to the Madras Army. While, as regards the Bengal Army, the three-battalion system would admit on emergency of two battalions being sent into the field, and having still a third battalion in reserve to act as a depôt and feeder; whereas, under the linked-battalion system, if it is to be worked properly, not more than one-half of those regiments could be employed on active service at a time. The same advantages would be gained in respect of the European officers. With a regiment of three battalions and 24 officers, it should be possible to keep the battalion on active service supplied with its full establishment of officers, and a valid objection to the present system of officering the Indian Army, namely, that either the number of officers maintained in peace time must be in excess of the wants of the service, or that a regiment on service may be denuded of officers to a dangerous extent, will be satisfied. We desire therefore to obtain your Lordship's authority to carry out at once the reorganisation of the native infantry upon the three-battalion system.

Adjutant General's letter as above, paragraph 27. Appendix A.

35. The full benefit of this measure can, of course, be prospective only. The men now in the service, who have enlisted for a particular battalion, cannot be transferred to another, except with their own consent; but hereafter a sepoy would enlist for a particular battalion with the liability to be transferred to either of the linked battalions.

36. As regards the officers, they should be placed, in our opinion, on the footing proposed by the Government of India in their Military Letter No. 230, of the 24th June 1881, paragraphs 28-29, the conditions stated in which should be generally adhered to.

37. We think that it is not necessary or desirable to alter the existing numbers of regiments. This may follow, perhaps, hereafter, but the change does not appear to be called for at present.

38. Next, as to the way of carrying out the change: First, with respect to the Madras Army. This consists of 32 battalions, two of which are pioneers; it would, therefore, form ten regiments of three battalions each, and a pioneer regiment of two battalions. The Government of Madras will be asked to propose the distribution.

39. The Bombay Army consists of 23 regiments of the Line and three local Biluch regiments. The Commander in Chief of that army has already proposed the order of linking those regiments, the three Biluch regiments, as one, and the rest of the army in seven regiments of three battalions each, with

Adjutant General, Bombay Army, No. 5-C.-T., dated 25th March 1882 (Pro. June 1882, No. 1157).
Government of Bombay, No. 3752, dated 6th July 1885. Appendix A.

with two spare; and as his Excellency is still of the same opinion, that order may be adopted. One of these spare battalions is the Marine Battalion. With the concurrence of the Bombay Government, we would propose that the other battalion be made into a pioneer regiment, or, which would be a better arrangement, that these two battalions should be formed into a regiment of pioneers. The Army Commission recommended that each of the Indian armies should contain a pioneer element; and we entirely concur in that opinion. The Punjab Pioneers have proved most valuable, and the Madras Pioneers, lately formed, promise well.

40. The Bengal Army may be conveniently considered under the three heads of Punjabis, Hindustanis, and Goorkhas.

41. The schedule attached to the Adjutant-General's letter shows the proposed way of grouping the regiments in threes. Of the 40 Line regiments of the Bengal Army, 23 belong to the Hindustani portion of it. In this number we include the 42nd, 43rd, and 44th, because, although they are mainly composed of Goorkhas, and have only a small Hindustani element, they are always stationed in Assam, and may be regarded as belonging to the Hindustani portion. These 23 regiments would be organised as seven regiments of three battalions each, and one regiment of two battalions, which two battalions might be converted into pioneers, if it should be found that such a change would be acceptable to the men.

Note.—There were 45 regiments up to 1882, but in that year five were broken up—the 34th, 35th, 36th, 37th, and 41st.

42. The remaining 17 Line battalions of the Bengal Army are Sikhs and Punjabis, two of these, the 23rd and 32nd, being Pioneer Muzbee Sikh battalions; the other 15 would be conveniently distributed in five regiments of three battalions each.

43. The Commander in Chief proposes to raise a new regiment of Muzbee Pioneers on the model of the 23rd and 32nd. We support this recommendation. This battalion would be linked to the above two, would be numbered the 34th, and would take the place of the regiment of that number which was reduced in 1882.

44. His Excellency also proposes to raise three more battalions of Sikhs. This recommendation we also desire to support. The number of Sikhs now serving is only about 11,400, and we think this important fighting element of the army may safely and properly be increased. The three battalions, if raised, would be organised in one regiment, and would be numbered the 35th, 36th, and 37th, in the room of those reduced in 1882.

45. There are five regiments of Goorkhas. Her Majesty's Government have authorised the raising of five additional regiments as second battalions of the existing ones. Under ordinary circumstances, therefore, only half of the Goorkha portion of the army would take the field; but if it were desired to employ this valuable force to a greater extent, this might be arranged, as soon as the second battalions have been raised, by organising a depôt battalion for the time, and sending both battalions of a regiment on a somewhat reduced scale into the field.

Despatch from the Secretary of State, No. 117, of 1885.

46. The Punjab Frontier Force comprises nine regiments of infantry, excluding the Guides, which might similarly be organised in three regiments of three battalions; the Guides to remain a separate corps as at present.

Strength of Native Infantry Regiments.

47. It will be seen that the Commander in Chief proposes to raise the establishment of the Bengal, Bombay, and Punjab Frontier Force regiments from their present strength of 832 to 980 of all ranks; the eight Goorkha and Assam regiments being also raised from their present establishment of 912 to 980 of all

all ranks. Sir Donald Stewart does not propose any augmentation to the Madras Infantry. His reasons for not doing so are given in the 20th paragraph of the Adjutant-General's letter.

48. We consider that if the army were to remain on its present footing of isolated battalions, with no reserves, the proposals of the Commander in Chief would be the very lowest which could safely be accepted. A battalion of even nearly 1,000 men would not furnish more than a proper strength at the outset of a campaign, and would soon, under the stress of war, run down to a much lower figure, and there would be no means of rapidly replacing casualties. But the two measures which it is proposed to introduce, the linking of battalions and the formation of a reserve, materially alter the aspect of the case. If the reserve system can be introduced successfully, these measures of reorganisation will admit for the first time of all the troops available, those in quarters as well as those in the field, being turned to the best account. And the question arises how far, in view of the aid which may be furnished by these two agencies towards keeping the battalions on active service in an efficient state, it would be prudent and reasonable to maintain an establishment on a scale somewhat smaller than that proposed by the Commander in Chief.

49. We think it may be accepted that the proper strength of a battalion in the field is about a thousand men, and that our organisation ought to be such as will admit of maintaining a battalion at that strength for at least one or two campaigns. Now in the case of a regiment of three battalions which sends only one into the field, there will remain two in quarters as a reserve, or a total, on the present strength, of about 1,400 men with which to strengthen the battalion in the field, after first bringing it up to 1,000 men. For such cases the existing establishment of battalions, 832 of all ranks, ought to suffice.

50. But in the case of what must be recognised as the most valuable fighting element of the Native Army, it might be found necessary to send two out of three battalions of several regiments into the field. In that case there would remain only about 400 men with the depôt battalion, after the two battalions on active service had been brought up to the war strength of 1,000 each. Such a reserve would be quite insufficient.

51. This calculation, however, leaves out of consideration the assistance to be derived from the reserve. The Army Commission recommended that this should be fixed at 200 men per battalion, so that a regiment of three battalions would have a reserve of 600 men, all of whom would be available for replenishing casualties in the one or two battalions on active service. Thus, if only one battalion were on service, there would be 600 reservists available before the other two battalions were drawn upon. If two out of three battalions went on service, they would each have a reserve of 300 men, besides the third battalion to fall back upon. So that with battalions 980 strong and a system of reserves, the number of men available at the beginning of a war might thus appear to be somewhat in excess of the needs of the case. We say at the beginning, because it is quite possible that in case of a prolonged campaign recruiting might fail, as happened in the last Afghan war, and then the reserves available at the outset would not prove to be more than necessary in the long run.

52. But there are two considerations which at the present time modify this view of the case. At the outset the men of the linked battalions would be available for transfer to another battalion of their regiment only with their own consent, so that we cannot count with any certainty on being able to fill up casualties from that source. And further, the possibility of establishing a satisfactory reserve system has yet to be ascertained by trial. Moreover, in order that a reserve should be established, it is necessary to strengthen the regiments in the first instance in order to form the reserve. It would not be expedient at the present time to transfer 200 men to the reserve, and leave the battalion for several months with only 600 effective soldiers, while recruits were being trained to supply their places.

53. In view, then, of all these considerations, we desire to submit the following proposals:—

First, as regards the Bengal Army. Every battalion to be recruited to a strength in the first instance of 980 of all ranks, and to be maintained at that strength until it has furnished 150 men to the reserve; the reserve to be then further increased by reducing the battalion to 912 of all ranks, which is the existing strength of the Assam and Goorkha regiments. Each battalion will then consist of 912 soldiers present for duty, and 218 men in the reserve. This process may be expected to take a couple of years to effect, by which time circumstances will probably indicate more clearly than at present whether or not this number of 912 is an adequate establishment for a battalion. This proposal differs from that of the Commander-in-Chief only so far that we contemplate a slight reduction on the reserve becoming complete.

54. Next, as regards the Bombay Army. We would propose a similar augmentation, but on a somewhat smaller scale.

Each battalion to be raised in the first instance from its present strength of 832 of all ranks to 912 of all ranks. As soon as the augmentation is completed, men to be passed into the reserve until that reaches a strength of 160 men, when the process would stop. The establishment of a battalion will then consist of 832 of all ranks, as at present, with 160 in the reserve. This proposal is for a smaller strength than that proposed by Sir Donald Stewart, both present and prospective.

55. For the Madras Army a similar arrangement is proposed, except that no augmentation would be made, but a reserve of 160 men to be formed as rapidly as can be effected, the places of the reservists being at once filled by recruits. This is the Commander in-Chief's proposal, with the addition of a reserve.

56. The result of these proposals would be an increase to the Bengal Infantry of—

47 battalions at 80	3,760
5 new Goorkha battalions at 912	4,560
3 new Sikh battalions at 912	2,736
1 new Pioneer battalion at 912	912
Increase	11,968
Present establishment	46,400
Proposed	58,368

57. There would also be a temporary increase to the Bombay Infantry of—

20 by 80 =	2,080

58. In addition, there would be the reserve—

Bengal, 64 battalions at 218	13,952
Bombay, 26 battalions at 160	4,160
Madras, 32 battalions at 160	5,120
	23,232

59. But no precise value can be attached to these figures for the reserve in the present state of uncertainty as to what may be the result of the experiment.

60. The increase proposed by the Commander in Chief of 68 men more per battalion for the Bengal Infantry amounts to 16,320, and this larger figure would also be reached under our proposals in the first instance until the reserve is completed. The increased proposed by him for the Bombay Infantry is 3,848.

61. The

61. The total increase to the Indian Army would be—

	Cavalry.	Infantry.	Total.
Bengal, including Central India Horse and Punjab Frontier Force - - - - - - - - -	3,089	11,968*	15,057
Madras - - - - - - - - - -	408	—	408
Bombay - - - - - - - - - -	1,075	2,080†	1,075
Total permanent - - -	4,572	11,968	16,540

* 16,320 in the first instance.

† Temporary.

62. In making this reduction on the proposals of the Commander in Chief, which involve an increase of 24,740 men, we are far from considering his proposals excessive. We are very sensible indeed that, considered with referenee to the altered circumstances which the Government of India have now to meet, his Excellency's views are very moderate, and that, even before the additions now proposed can be carried out, the pressure of circumstances may involve an entire alteration of plans, and an increase to the Indian Army, both British and Native, on a much larger scale. But we have also in view the strong obligation upon us not to place a heavier burden on the finances of the country than they can bear without serious strain. That some augmentation must be made to the army will, we think, be accepted as necessary by all authorities who have to deal with the subject. The proposals now submitted comprise, we think, the very smallest measure compatible with reasonble precaution, and we have framed them on this scale because we think it is better to confine ourselves, in the first instance at any rate, to a measure which may have to be enlarged, rather than to put forward one which might afterwards admit of being reduced.

63. It will be seen from the estimates attached to this letter that the effect of our proposals will be an increase to the military estimates of 1,196,800 *l.* a year. The proposals of the Commander in Chief would cost 1,616,200 *l.* a year, or, taking into account home charges, reliefs, &c., about 500,000 *l.* a year more than ours. It will be observed that the estimates do not include non-effective charges. Appendix G.

Conditions of Service in the Reserve.

64. We have already stated that we propose in the first instance to limit the reserve to about 23,000 men. If it is found on trial that such a force can be satisfactorily established, it can be augmented hereafter, should circumstances render an augmentation desirable. The proposals of the Army Commission on the subject, which are reproduced in the appendix to this letter, were for a reserve pay of four rupees a month, payable half-yearly; this rate to be continued after 21 years' service with a reduced liability to serve only on garrison duty, and after 32 years' service on a pension without any further liability. Appendix C.

65. In our letter No. 44 of 1885 we proposed a gratuity at the rate of 20 rupees a year; also a gratuity of 120 rupees at the end of 15 years, when the man's service would be completed.

66. On a further consideration we are disposed to give the preference to the general plan of the Army Commission, because it is probable that the sepoy will attach great value to the certainty of the fixed allowance from the time he passes to the reserve for the rest of his life. Moreover, a difficulty would arise in the

case of men called up for active service, and who afterwards returned to he reserve, if they gained thereby no claim to pension. We propose, therefore, to adopt the plan of the Commission in its main features. Their limitation, however, of 12 years' service before a man becomes eligible for admission to the reserve, would not furnish a sufficiency of men for the purpose, because in many regiments the greater proportion of the men are quite young soldiers. The Commander in Chief has proposed a scheme fulfilling the needful conditions, which is attached to this letter; it will be seen that they comprise the following main points:—

Appendix D.

Adjutant's General's No. 2352 B., dated 28th July 1885.

Men to be eligible for the reserve after three and up to 12 years' service.

The reservist to be liable to garrison duty only after 21 years' total service, and to be eligible for pension after 32 years' service.

The pay for privates to be *Rs.* 3. 8. a month.

A scale of gratuities is provided for men disqualified for service before completing service for pension.

67. It will be a feature of the reserve system that each regiment under the new organisation will have one of its battalions always stationed at or in the neighbourhood of a particular district, so that wherever the other battalions may be, there will always be a depôt battalion in a fixed place to which the reservist will be attached when he comes up for his training every year or every alternate year. There will be no difficulty under the present organisation of regiments in arranging this.

68. When the reserves are completed to the maximum strength proposed in paragraph 60, the total cost would be 9,75,744 rupees per annum.

69. The Commander in Chief makes a proposal for forming a small cavalry reserve, which we desire to adopt.

There would also be a second reserve of men of 21 years' service and upwards. The strength of this force cannot be estimated with any precision, but it would certainly be small.

Improvement of Position of the Native Soldier.

70. In making arrangements for the augmentation of the Native Army, it is necessary at the same time to combine with them such measures as may serve to ensure that the increased numbers of soldiers wanted shall be forthcoming. For we must not leave out of sight the fact that of late years it has become comparatively difficult to obtain recruits. Whereas in former years service in the army was so popular that practically any number of sepoys could be obtained immediately on the call being made, latterly the recruiting has barely sufficed to make good the ordinary rate of casualties on the peace establishment. The main cause for this falling off we believe to be simply that, while the sepoy's pay has remained at its present rate of seven rupees *per mensem* during the present century, the rate of wages for all other employments has risen. In fact, we have now reached a situation in India analogous to that which obtains in England. The Indian Army, like the British Army, is raised by voluntary enlistment, and the rate of wage offered to the soldier is lower than what can be obtained in most other employments, even of a menial kind, and by classes inferior to him. For the non-combatant classes of the army, transport attendants, doolie-bearers, &c., the rates of pay have had to be largely raised from time to time, till they now approximate closely, and in some cases exceed those given to the soldier. The time has come then, in our opinion, when it has absolutely become necessary to take steps to restore to military service the popularity it formerly possessed, and thus to regain the source of military strength which the Indian Government should always be able to command, an unlimited supply of fighting material. And it is in the highest degree desirable to make the needful change at once, so that the rate of recruiting may be satisfactorily maintained in the present time of peace. During the last Afghan war recruiting came practically to an end, notwithstanding the high bounties resorted to. It would be disastrous to find that,

that, if war broke out, a call for more soldiers failed to obtain response, while there would be grave objections to raising terms under stress of emergency. Whatever needs to be done in this way should, we think, be done at once.

71. One boon which would be greatly appreciated by the sepoy would be the grant to him of a free railway pass when going on and coming back from furlough. Fifteen per cent. of the men of a regiment are usually allowed to take furlough each year. In the case of a Punjab regiment serving in Bengal, or a Hindustani regiment serving on the frontier, the cost of the railway journey both ways may be as much as the sepoy's pay for three months. We propose in future to give the regular number of sepoys granted furlough and travelling by rail a free railway pass. It is impossible to estimate accurately the cost of this measure, because the stations of the regiments, and therefore the distances of the men from their homes, vary from year to year; and many men make the journey on foot from inability to pay the railway fare. But we may observe that on the State lines the cost to Government will be very small as compared with the saving to the sepoys. What really will happen is that Government will forego the profit it now makes out of the sepoys who travel. On the lines which do not belong to the State, we shall arrange for the sepoy going on furlough to travel at troop train rates, which will be paid by the Government. This change is recommended by the Commander in Chief.*

* Adjutant General's Letter, No. 2204 B. dated 16th July 1885.

72. In 1877 the terms for the grant of good conduct pay were improved, and at present the sepoy receives a first grant of one rupee a month after three years' service, a second rate of two rupees after nine years' service, and a third rate of three rupees after 15 years' service, when his pay becomes 10 rupees. We would recommend that the second increment be given after six years instead of nine years' service, and the third increment after 10 years instead of 15 years' service. We recommend this change in view of the fact, which is clearly shown in the annexed tables, that the great drain on the army now takes places from the proportionately large number of privates who claim their discharge in the early years of their service; a drain which grants of good conduct pay at earlier periods than the present may tend to check.

Appendix E.

Appendix F.

73. The rules for the payment of recruits in Bengal and Madras are not very satisfactory, inasmuch as the recruit does not get his full rate of pay until he joins his regiment. We propose to modify the rules in this respect.

74. The sepoy has to provide his own great-coat at a cost of from 10 rupees to 13 rupees. This is a heavy charge, and we think the annual allowance for kit, "half-mounting," as it is termed, should be increased from four rupees to five rupees in order to meet it.

75. One cause of the unpopularity of the service of late years is undoubtedly the long distances at which the men are called upon to serve from their homes during peace time. Service in Bengal is distasteful to the Punjabi, and equally so is service in the Punjab to the Hindustani; while politically it is not desirable to mix up the two classes promiscuously to any great extent in peace time. We have in previous letters enlarged on the importance of maintaining this segregation. There are at the present time only four Hindustani regiments serving in the Punjab, and five Punjabi regiments serving in Hindustan. The liability to this distant service exists, however, for every sepoy, and we have reason to believe that it is a cause of making the service unpopular. The measure proposed for constituting the Bengal Army in two separate commands in peace time would practically put a stop to this altogether.

76. Another matter in the position of the sepoy which calls for improvement, but in which the change can be made only gradually, is in respect of his hutting accommodation. The hutting allowance as at present given is insufficient to enable the men to hut themselves properly; and moreover the state of things under which this allowance was first sanctioned, when the men really lived in huts which they built themselves, has passed away. The sepoys throughout India are now quartered in what are really very inferior barracks, which however are not kept up by the State, but are maintained by the men on their hutting allowance. The result is that in a large number of stations the quarters of the native troops are quite unfit for habitation. Some definite action in the way of improvement would possibly have been taken before this

but for the great outlay which was being incurred for the accommodation of British troops. The British troops, however, are now well provided for as regards barracks in almost all parts of India, and the necessity for improving the quarters of the native troops, who undoubtedly suffer much in health from their present insufficient accommodation, has lately been engaging the attention of the Government. Some improved lines for native troops have lately been built in the Madras Presidency under the supervision of the Commander in Chief, and also in Bombay, and we hope soon to arrive at a definitive conclusion as to what should be the scale of the accommodation necessary, and the cost at which it may be supplied. As soon as these points are satisfactorily settled, we shall be prepared to furnish grants to be expended under regimental arrangements for constructing wholesome accommodation for native troops throughout India on a systematic plan, so that the measure may be carried out to completion within a definite term of years. We may mention that the Punjab Frontier Force has already been provided with excellent barracks built by the State. So have been the Local Service regiments.

77. Last, but not least, we propose to improve the position of the sepoy in respect of the pension rules. At present no man can claim a pension until he has completed 32 years' service, a period before which the sepoy has ceased to be a really effective soldier for active service. We recommend that the time at which pension can be claimed, irrespective of health, should be fixed at 21 years' service for all ranks of the regular army. This measure ought to conduce much to the popularity of the army. At present the distant prospect of pension has no sensible effect in keeping the private soldier in the ranks. The amount of extra charge this will involve cannot be precisely stated; but it will not be large, for it will be seen from the attached tables that the proportion of old soldiers in the army is very small.

78. If this change be made, the present invalid pension after 15 years' service should be abolished prospectively, and the scale of gratuities extended for men discharged for ill-health with less than 21 years' service.

Reductions and Reorganisations.

79. We now turn to consider what saving may be effected as a partial set-off against this additional outlay. The regimental establishments being increased, economies can be effected only in the staff and departments of the army; and, in pursuance of Lord Kimberley's instructions,* we have now to state how far these are susceptible of reduction. And we may at once say that, in our opinion, this can be effected only by a reform and simplification of military administration on the lines proposed by the Army Commission, and recommended for adoption by the Government of India in 1881, and again pressed in 1883.

* Despatch No. 39, dated 12th February 1885.

80. We may first note that the following measures, proposed by the latter in dealing with the report of the Commission, which involve in most cases a reduction of expenditure, and in others a great improvement in procedure, have already been carried out:—

Reduction of the number of Native regiments of the Indian Army, with a corresponding increase to the strength of the remainder.
Reorganisation of the Ordnance Department.
Partial reorganisation of the Commissariat Department.
Formation of an Army Transport Department.
Introduction of the station hospital system for British troops. The larger measure proposed of the reorganisation of the Medical Department has not been carried out.
Partial reorganisation of the Army Veterinary Department.

81. There still remains to be carried out the reduction of commands and army staff, and the establishments connected with the different military departments, which was proposed as a part of the general scheme for the reform of army administration. And upon this point we desire again to submit, for the consideration of Her Majesty's Government, that the abolition of the presidential

tial system in its present form, recommended by the Army Commission, and earnestly pressed upon the Secretary of State for India by Lord Ripon's Government, should now be carried out without further loss of time. We urge this in the strongest way, not so much because, as will be seen from the figures to be given below, it is the only means of effecting that reduction of expenditure which we consider it to be incumbent on the Government to effect, as because we are very deeply sensible of the grave inconvenience which must result if this Government is called upon to undertake extensive military operations under the present system of divided military administration. Unless this measure be agreed to, the Indian Government would embark on war weighted with this division of military authority and responsibility. It will be unnecessary here to repeat the arguments which have already been advanced by Lord Ripon's Government in favour of this pressing reform. We would merely invite your Lordship's particular attention to the letters of the Government of India in 1881 and 1883, in which the case for change is stated at great length, only adding the expression of our conviction that the events of the past few months have entirely confirmed the apprehensions expressed by the Government of India of the ill consequences that might follow if this reform should be deferred until the season of quiet had passed away. We regret that the advantage was not taken of a less critical time than the present to effect the change, and we feel that any further delay in dealing with this matter is to be deprecated. Even in such a comparatively small matter as the provision of supplies for the troops warned for service in Biluchistan, and the arrangements lately made for placing those troops in the field, the evils of divided control, notwithstanding the hearty and loyal co-operation manifested by the different authorities concerned, were very apparent. And we should regard with considerable misgivings the prospect of undertaking actual war under such disabilities. We would therefore press that the needful action may be taken for carrying this change into effect without further loss of time.

No. 85 of 1881.
No. 282 of 1881.
No. 401 of 1881.
No. 243 of 1883.

82. As regards the troops stationed beyond the limits of the Madras and Bombay Presidencies, in Burma, Rajputana, &c., it would be practicable to introduce at once the more simple and convenient procedure recommended by the Government of India in their letter, No. 208 of 1884, which accordingly, with your Lordship's sanction, we propose to adopt for the troops in these provinces, as we have already found it necessary to do for the troops in Biluchistan. Paragraphs 7, 8, 90.

83. We may here notice that the present is a suitable time for making the larger reform advocated, because the three commands in India will shortly become vacant, and the successors to these appointments in Madras and Bombay might be nominated under the new conditions.

84. There is a further change which we recommend should be at once carried out, the transfer of the Punjab Frontier Force to the orders of the Commander in Chief in India. It is unnecessary to repeat here the reasons which have already been advanced at length for this measure, but recent events have shown it, in our judgment, even more plainly than before to be necessary. Moreover, a considerable part of the Punjab frontier is now overlapped and covered by the territory occupied by us in Biluchistan, and so has ceased to be a frontier in the original sense; that the force which garrisons the former country should be subject to a different jurisdiction from that of the regular army stationed beyond it is a source of constant trouble and embarrassment, and is opposed to rational principles of administration. We do not, however, propose to make any change in the organisation of the Punjab Frontier Force, which should continue to be a purely local force stationed beyond the Indus and in Hazara, and also, perhaps, if necessity arises, at Multan, but simply that it should come under the direct orders of the Commander in Chief. We have reason to believe that the transfer would be very acceptable to the officers of the force, who probably feel with us that the state of things, which at one time rendered a local administration of the force appropriate, has now passed away.

85. If these recommendations for simplifying Indian army administration be carried out, then the reduction in the commands and staff of the army proposed

Report, paragraphs 84–90.

by the Commission may also be carried out. These are, briefly, the reduction of the present 35 divisions, districts, and brigades commanded by general officers into 25 districts, and a reduction of the staff.

86. The distribution of troops throughout the country has been somewhat altered since the Commission reported, and some further changes will be necessary owing to the occupation of Pishin. But we should be prepared to carry out the change on the lines proposed by the Commission; that is, to reduce the number of commands to 25, and the staff to the scale proposed by them. We attach an estimate framed in accordance with these conditions, which shows a saving upon present charges for staff and commands of about 2¼ lakhs a year. This estimate provides for a reduction of the staff of the two lieutenant generals commanding in Madras and Bombay, and also for the appointment of two lieutenant generals for the eastern and western portions of the Bengal army.

Appendix H.

87. The other items of saving will be in the abolition of the Military Departments of Madras, Bombay, and the Punjab. In our military letter of 1881 on this subject,* the financial result of these measures was stated at 1½ lakhs per annum. Lord Kimberley, in his Despatch† in reply, questioned the sufficiency of this estimate on the ground that the additional work thrown upon the Government of India would absorb a large part of the saving to accrue from the change. But since that estimate was made, the experience gained of the saving to the Government of India Secretariat in correspondence, owing to the centralisation of the administration of the Ordnance Department and the appointment of a director general, and also the partial centralisation of the Commissariat Department by the appointment of a Commissary General in Chief attached to the Government of India, satisfies us that, so far from the proposal to assume the direct administration of the Indian armies leading to increased work, the result will be rather the reverse.' Centralisation and simplification of military administration reduce, and do not increase, the labours of this Government. The concentration of the military offices, including Army headquarters, in one group of buildings at Simla has also materially tended to reduce business and correspondence. And we are satisfied that any additional work which might come on the Government of India by undertaking the direct administration of all the Indian armies in those small details which still remain to be taken over would be sufficiently met by the additional establishment proposed, and that the business of the Military Department, or, as it would properly be called, the War Department of the Government of India, would be amply provided for under the estimate made in 1881. The total saving, therefore, which could be claimed for the proposal would be in—

* No. 336, dated 9th September 1881.

Departments to be abolished—	*Rs.*
Military Department, Madras -	63,700
Military Department, Bombay -	86,000
Military Department, Punjab - -	42,000
	1,91,700
Deduct—Additional expenditure for Military Secretariat, Government of India - - - - - - -	35,880
Net Saving - - -	1,55,820

† No. 243, dated the 26th July 1883, paragraph 3.

	Rs.
Staff and Commands - - - - - -	2,24,648
Army Departments - - - - - -	1,55,820
Total - - - *Rs.*	3,80,468

88. This is only a small saving to place against the large increase of military expenditure proposed. But, as far as it goes, a saving of this sort may be regarded as satisfactory, if it can be effected not only without interfering with the efficiency with the Army, but as part of a most important and present reform.

89. The Commander in Chief desires to record his opinion that he adheres to his own proposals for the larger increase of both European and Native troops than that proposed in this Despatch, believing the addition of 16,000 British troops to be the smallest required by present circumstances; while his Excellency considers that the Native Army cannot be increased to the extent

extent desired by him unless the established proportion of British troops also is supplied.

90. Our honourable colleagues, Mr. Ilbert and Sir Auckland Colvin dissent from some of the recommendations contained in this Despatch; their reasons for doing so are embodied in the accompanying minute.

We have, &c.
(signed) *Dufferin.*
D. M. Stewart.
T. F. Wilson.
C. P. Ilbert.
S. C. Bayley.
T. C. Hope.
A. Colvin.

Enclosure in No. 25.

MINUTE by the Honourable Sir *A. Colvin* and the Honourable Mr. *C. P. Ilbert* on the proposed permanent Increase to the Strength of the Indian Army.

1. WHILST fully agreeing in the proposals of our colleagues for a better organisation of the Indian Army, we regret that we are unable, for the reasons given in this Minute, to concur in the recommendations of the Despatch which it accompanies, regarding a permanent increase in the numerical strength of that army. We have no desire to dispute the claim of our military colleagues to speak on the point with greater authority than any to which we can pretend; but we perceive that there is great divergence of opinion on the subject among military men; and we think that, in the consideration which has been now given to the subject, the obligation of the English Government to contribute towards the safety of its Indian Empire has been unduly minimised.

2. The Indian Army Commission, who were appointed by and reported to Lord Lytton's Government, who wrote with perfect knowledge of the rapidity and the direction of the Russian advance in Central Asia, and on whose recommendations are based some of the most important proposals of the Despatch, summarised as follows, in their Report of November 1879, the purposes for which the Army of India must be maintained:—

"(*a*) Preventing and repelling attacks, or threatened aggression, from foreign enemies beyond the border.

"(*b*) Making successful armed disturbance or rebellion within British India or its feudatory states impossible.

"(*c*) Watching and overawing the armies of Native feudatory states." (Report, Paragraph 17.)

3. It appears indisputable from the Report that, in their enumeration of these purposes, the Commission contemplated the contingency of operations beyond the frontier, not merely against Russia with Afghanistan as our ally, but against Russia assisted by Afghanistan.

They say: "The external foes which the Indian Army may have to meet on its land "frontier are Russia and Afghanistan on the north-west. . . . . For operations "against Russia, or Afghanistan assisted by Russia, a force of two army corps, or 50,000 "to 60,000 fighting men, might possibly be necessary. No one has ever suggested that "the Army of India should be maintained at a strength necessary to put into the field a "larger force than this." (Report, Paragraph 17.)

4. They were of opinion that the Army of India, if properly organised, was sufficient to provide for the purposes thus enumerated, without any addition to its numerical strength.

5. They expressly made the reserve that, in making this estimate, they did not take into consideration the contingency of a permanent or lengthened military occupation of Afghanistan.

"We have not considered," they say, "the question of the future military occupation "of Afghanistan proper, or any part of it not embraced in the conditions of the Treaty "of Gandamak. We are well aware that, if there is to be a permanent, or even a "lengthened, military occupation of Afghanistan, it can no more be provided from the "Army, or the distribution of the Army that we propose, than it could be from the Army "as it now is. There can be no doubt that the duty of garrisoning Afghanistan will not "be popular with the regular Native troops, and that if the occupation of the country is "of any duration, constant relief of regiments will be called for, which will involve the

"maintenance in India of a number of regiments extra to the present establishment. We "presume, therefore, that if Aghanistan is to be occupied for any great length of time— "a matter on which, as far as we know at present, no decision has been arrived at—regi- "ments will be specially raised in India, and perhaps to some extent in Afghanistan itself, "for local service in that country, thus obviating the necessity for a system of constant "relief from the regular Native Army."

6. The data on which the Army Commission based their estimates have not, so far as we have been able to learn, been proved insufficient. Nor is it suggested that, in consequence of any changes which have been made since the Commission's Report was presented, the fighting power of the Indian Army is less than it then was. On the contrary, our honourable military colleague, in a Minute dated 10th September 1884, which was forwarded to the Secretary of State under cover of a Despatch dated the 10th of March last, expresses himself as follows in respect of these points: "Until she (Russia) "is much further consolidated on the Herat frontier, she will, I believe, make no further "attempt to advance towards India; and then her task is gigantic" (paragraph 45). He considered a small increase in the strength of the Army necessary, which should not exceed 10,000 in all, of whom 4,000 would be Europeans; neither was he disposed to say that this increase should take place immediately. He wrote further:—

"Thus the general result of what was effected in 1882 has been that the strength of "the Native and British troops remains what it was before the changes were made; but "the Army is organised on a more economical, efficient, and useful basis, better adapted "to war and the general requirements of the country, and, from the increased strength of "the battalions, more in accordance with the recommendations of some of our most expe- "rienced officers. Thus, in considering the present strength of the Army, it must be "prominently kept in view that the result of the changes carried into effect in 1882 did "not bring about a reduction in the total strength of our fighting power in India" (paragraph 34).

The contingency which the Army Commission, when it submitted its Report, thought possible has now become more possible; but this furnishes no ground for believing that the precautions then recommended as sufficient, in the event of such a danger overtaking us, are insufficient now. It is necessary, on the contrary, to remember that since the Commission wrote, a large scheme of strategical frontier railways has been sanctioned, and is being vigorously pushed on; while an elaborate plan of frontier defensive works is also about to be put into execution. Apart altogether from the immediate purpose which they are expected to serve, these works will add indirectly, but not inconsiderably, to the mobility and the fighting strength of our forces.

7. The frontier fortifications to which we refer cannot require, for their occupation, an increase to the Indian Army of 27,000 men. We fail to see why any force needed for this purpose should not be obtained in the mode contemplated by Lord Lytton's Government, that is to say, by withdrawing the necessary troops from other parts of India. [*See* Paragraph 13 of the Despatch of 22nd May 1879: Blue Book on East India (Army System), p. 3.]

8. If the above reasoning is correct, there seems to us every reason to apprehend that the increase of our forces beyond the needs enumerated by the Army Commission may prove a weapon less of defence than of aggression. The presence in India of so strong a force as is desired may even suggest the permanent occupation of some part of Afghanistan. Against the policy of extending to a point beyond Kandahar, the frontier, formal or practical, of British India, and the area which must be permanently held by British troops, weighty arguments, moral, political, and financial, have been, and may still be urged. But, whatever may be the merits of such a proposal, it forms no part of the grounds on which an increase to our Army is now advocated; and is foreign, we have every reason to believe, to the desires or intentions of our colleagues.

9. We are thus of opinion that as no circumstances have arisen which, from a military point of view, have not been already foreseen and guarded against, the proposal to increase the strength of the Army by 27,000 men should be negatived. We are further of opinion that the proposal is open to the objection that it may lead to the advocacy, and possibly to the adoption, of projects for the extension of our present frontier. The question then narrows itself to this: Is it the duty of the Government of India to maintain and charge to Indian revenues a permanent addition to its forces, not required for India, but available for the purpose of extending and securing its dominion beyond India?

10. We are wholly unable to admit that the Indian Government is under any obligation to maintain a standing army beyond the numbers indicated by the Army Commission, or for purposes other than those enumerated by them. They can draw on England, as in practice they always draw, should necessity arise for a temporary increase to the forces in India; obtaining what is required, paying for it so long as it is needed, and dismissing it when the need is over.

11. Where is the line to be drawn if India admits its liability to maintain a force strong enough, not only to fulfil the purposes which have been enumerated in this Minute, but to acquire and maintain against all comers positions in Afghanistan, or elsewhere? It is desired,

desired, apparently, to have a force for home use, and a force for exterior use. The necessary strength of the former can be measured; but where is a measure to be found for the latter? It has to deal with that unknown quantity, the assumed military possibilities of the Russians in Central Asia and Afghanistan. If the principle is admitted that an army is to be maintained from Indian revenues for exterior use, it is difficult to see how its numbers are to be controlled, or why we shall not presently be told that 100,000 men are as necessary as 10,000. It has been already pointed out that the existence of such a force would be no mean agent in bringing about the very risk which it is meant to obviate. A standing army which is larger than is necessary for home requirements will be a tempting, and almost an irresistible, weapon of offence beyond the border.

12. It is asked how provision is to be made for an increase of native troops should a merely temporary addition to the English force in India in the event of war be advocated. We reply that, unless our frontier is to be extended, we are unable to see the necessity for any such increase. If, on the other hand, the frontier is to be extended, the new territory acquired must, we believe, be held by the aid of local levies. Experience, it is agreed on all sides, has shown that Indians will not enlist for service beyond the frontier. It must be further remembered that a system of reserves, such as it is proposed to initiate, will gradually furnish us with the power of increasing our native forces to a considerable extent.

13. It can hardly be contended that the mere establishment of a reserve necessitates, of itself, an increase in the English force, and that the latter must be proportioned, not only to the native force actually under arms, but to that force *plus* the reserve.

The Appendices to the Despatch prove how large a number of young men trained to arms annually leave the army, and are scattered about the country. These men, though unavailable for the purpose of increasing our military strength, are as much an element of danger as the proposed reserve will be. No count has been hitherto taken of their existence, we believe, in fixing the strength of British troops in India. Nor, whatever may be urged as to English troops, can the existence of a Native reserve possibly furnish arguments for an addition to the number of our Native Army.

14. Finally, it is stated that, even were all we have urged to be admitted, we cannot depend on England for reinforcements, and that we must not risk the Indian Empire on the ability of the English Government to furnish us with troops at the moment we may happen to want them. The alternative appears to us unquestionable; if India is to maintain troops additional to those needed for her own requirements, solely because England cannot be trusted to supply them, our military and financial arrangements with the English Treasury should be so altered as to set free a sum equivalent to that required for the addition to our forces in India.

15. So far we have dealt with general considerations. The financial effect of the proposals makes the case against them, in our opinion, more cogent. It is not contended even by those who desire to add no more than 10,000 to our English and 17,000 to our Native troops, that the total ultimate cost will be less than about 1,500,000 *l.* a year. There can be no doubt that, to meet this cost, we shall be compelled to resort to taxation of a considerable amount, and seriously to burden our finances. So far, on the other hand, as we effect our object without taxation, it can only be by charging to loans the very costly unproductive military works in which we are at present engaged, the execution of which, at least in part, we believe to form an obligatory charge upon our revenue.

16. On the subject of taxation, we desire to draw attention to paragraphs 9 to 14 of the late Viceroy's Minute of 22nd September 1884. We agree entirely with the opinion of those who hold that, as an alien people, our best claim to the regard of the natives of the country, and therefore one of our main sources of security lies in the fact that taxation is light. We believe that this is a principle which has been admitted by all Governments foreign to their subjects, and that it has been uniformly recognised and adopted by our predecessors in the administration of British India. It seems an axiom which at the present time it is singularly incumbent on the Government of India to bear in mind. If it was important when India had no European neighbour, it becomes much more so when she has at her frontier a power whose agents will make the most of all our mistakes, and will bid against us, by every means at their disposal, for popularity. We are aware that it is easy to push this consideration too far, and that the Indian Government must be prepared to risk a certain unpopularity if it is convinced that the measures which it has in view, and for which the imposition of burdens is required, are of so urgent a character as to necessitate their adoption, all drawbacks notwithstanding. But we have given in this Minute our reasons for holding that in the present instance no sufficient case is made out for departing from the policy above indicated.

17. There is considerable probability of our being called upon after a term of years during

during which our precautions have proved uncalled for, and our taxation has appeared vexatious, to relax our precautionary measures, and of our then being tempted to pass from the extreme of precaution to the extreme of negligence.

18. We do not deny that there may be force in the contention to which we have alluded, that, if we look to England for reinforcements in the event of war, we may find the English Government incapable, when called upon, of meeting our requirements. But there is at least an equal risk that if we accept from such an apprehension burdens which do not belong to us, we shall find ourselves keeping up, at the cost of the India revenues, a reserve which, in the event of circumstances arising that necessitate the action of troops for extra-Indian purposes, as in the case of Egypt, Abyssinia, and the Soudan, will be drawn upon by the English Government.

19. To sum up: Regarding, for the reasons we have given, the proposed increase of the Indian Army as unnecessary, we adhere to what are described by the late Army Commission as "the principles so strongly enunciated by Lord Mayo, and reiterated by his "successors, that the people of India ought not to be called upon to support or pay for "one single unnecessary soldier" (paragraph 575). We cannot admit that it is the business of the Government of India, under the apprehension that reliance cannot be placed on the Government in England, to assume more than its hitherto recognised share of the common obligation. We would not accept as a charge upon Indian revenues any single item of expenditure which should be undertaken by the Government at home.

A. Colvin.

C. P. Ilbert.

Simla, 14 August 1885.

APPENDICES to MILITARY LETTER, No. 135, dated 14th August 1885.

Appendix A. - -	Proposed increase of the Indian Army, and introduction of the linked battalion system.
„ B. - -	Statement showing the established strength of British troops in India from 1860 to 1885.
„ C. - -	Proposals of Indian Army Commission regarding creation of a reserve for the Native Army.
„ D. - -	Proposals of the Commander in Chief for the formation of a reserve for the Native Army.
„ E. - -	Proposed grant of free passage by railway to non-commissioned officers and men of the Native Army proceeding to or returning from their homes on furlough.
„ F. - -	Statements showing the length of service of non-commissioned officers and rank and file of the Bengal, Madras, and Bombay Native Cavalry and Infantry.
„ G. - -	Statements showing the approximate annual cost of the increase to the British and Native Army in India as proposed by the Commander in Chief and the Government of India.
„ H. - -	Statement showing the estimated saving by the changes proposed in the staff and commands of the Indian Army.
„ J. - -	Present and proposed strength of Indian Army.

ENCLOSURES to MILITARY LETTER, No. 135, dated 14th August 1885.

APPENDIX (A).—[Paragraph 2 of Letter.]

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department.—(No. 2009-B.—"Native Army" Organisation; dated Simla, 3rd July 1885)—(Confidential).

IN the judgment of the Commander in Chief, the time has now arrived when it has again become the duty of his Excellency to urge upon the consideration of the Government of India, the measures for that increase of the army which the present condition of public affairs has rendered necessary.

2. In a Minute written by the Commander in Chief on the 8th September 1884, and which is before the Government, his Excellency pointed out that the question for consideration at that time was "whether the army, which was considered suitable for the defence of India when Russia was at a distance from which she could not molest us, is adequate to the increased strain that is placed upon it by the advance of that power to the confines of Afghanistan."

3. The course of events since that Minute was written has more than justified the recommendations for an increase to our military strength which were therein made; and the situation now demands as urgently indispensable measures which might then have been regarded merely as desirable precautions. The menacing attitude of Russia, and the renewed obligations which we have undertaken in regard to the integrity of the Afghan kingdom, render it imperative that our military forces should be on a scale commensurate with our national obligations and the effective defence of our Indian Empire.

4. The letters quoted in the margin contain the recommendations on this subject which his Excellency has already submitted for the consideration of Government, and it is proposed in the present communication to summarise and repeat those recommendations, and to supplement them by certain proposals regarding the organisation of the Native army, the adoption of which, the Commander in Chief considers, would materially conduce to its efficiency.

Quartermaster General's No. 1184-A., dated 2nd April 1885.
Adjutant General's No. 1877, dated 14th March 1885.
Adjutant General's No. 2027, dated 19th March 1885.
Adjutant General's No. 2467, dated 7th April 1885.
Adjutant General's No. 1679, dated 25th April 1885.

 5. In regard

5. In regard to the British army in India, the Commander in Chief is of opinion that the normal establishment should be increased from its present strength of 59,206 men* to a strength of about 75,000 men.*

This number would allow of 30,000 men being retained in India as garrisons for those strategical points which it is considered necessary to hold, and of a field army of 40,000 men, leaving a margin of 5,000 men to cover those deficiencies of actual strength as compared with establishment which are almost certain occasionally to occur.

His Excellency is moreover of opinion that no increase can be made in the Native army without a proportionate augmentation in the British forces.

The greater part of this increase of about 16,000 men* would be most economically, and, in the Commander in Chief's opinion, advantageously provided by adding a fourth squadron to each regiment of cavalry, thus raising each corps from 454 to 602 men,* and by increasing each battalion from 780 to 960 privates.

These measures would give a total increase as follows, viz.:—

(1). Increase of one squadron of 148 men each to nine regiments of cavalry (148 × 9) = 1,332 men.*

(2). Increase of 50 battalions of infantry by 180 privates each (50 × 180) = 9,000 men.

This leaves a balance of 5,668 men to be provided by bringing out fresh cadres from home; and his Excellency recommends that, in order to provide the increased strength in garrison artillery, which the armament of the existing fortifications and of those now under construction (irrespective of the projected frontier defences), will necessitate, these cadres should consist of the following units:—

	Men.*
1 Regiment of cavalry	602
1 Battery horse artillery	157
2 Field batteries	314
4 Garrison batteries	460
4 Battalions infantry on the proposed strength	4,256
	5,789

If these measures were adopted, the total increase to the British army would be represented by the following figures:—

	Men.
Increase to cavalry now in India	1,332
Increase to infantry now in India	9,000
Increase by fresh cadres from home	5,789
Total Increase	16,121

6. The Commander in Chief desires to lay especial stress on the recommendation to add a fourth squadron to regiments of cavalry, both British and Native; and his Excellency feels bound to place on record his conviction that, unless this measure is adopted, the organisation of this arm will remain radically defective.

On parade, and for all movements of manœuvre, whether in peace or war, a regiment of cavalry should be formed into four squadrons; but if the regiment has an organisation of only three squadrons, the fourth squadron, if formed, must be made up of men drawn from different troops, and must therefore lack that cohesion which is essential to the efficiency of any military unit. It is therefore obvious that to organise a cavalry regiment in three squadrons is but a makeshift expedient, and that the natural organisation of the arm is into regiments of four squadrons each.

7. The above paragraphs show the manner in which the Commander in Chief considers the necessary increase to the British army in India may be most economically and conveniently provided; but if the Government should decide that it is not advisable to increase the present establishments of regiments, and that the increase should be in the form of fresh cadres to be brought out from England, then his Excellency begs to submit his recommendations that the cadres should be as follows, viz.:—

	Men.
4 Regiments of cavalry	1,816
1 Battery horse artillery 2 Batteries field artillery 4 Batteries garrison artillery	931
15 Battalions of infantry, at 884 each	13,260
Total	16,007

8. In

* Exclusive of officers, but including warrant officers, non-commissioned officers, and men.

8. In regard to the Native Army, the Commander in Chief desires to repeat his recommendation that a general increase of about 25,000 men should be made to its strength.

9. This increase should, in the cavalry, for the reasons stated in paragraph 6, take the form of a fourth squadron; and his Excellency proposes that the 17 regiments of Bengal Cavalry and the four regiments of Punjab Frontier Force Cavalry should in future have the following establishment, viz.:—

Ressaldars	4
Ressaidars	4
Ressaidar Woordie Major	1
Jemadars	8
Kote Duffadars	8
Duffadars	64
Trumpeters	8
Sowars	528
Total	625

which is an increase on the present establishment of—

Ressaldar	1
Ressaidar	1
Jemadars	2
Kote Duffadars	2
Duffadars	16
Trumpeters	2
Sowars	51
Total	75

The two regiments of Central India Horse should each be of the same strength, viz., 625, as a Bengal Cavalry regiment, which would give an increase as follows on their present establishment:—

Ressaldar	1
Ressaidar	1
Jemadars	2
Kote Duffadars	8
Duffadars	10
Trumpeters	2
Sowars	108
Total	132

10. The Commander in Chief further recommends that three new regiments of cavalry should be raised in Bengal, each to be of the new strength of 625 natives of all ranks. It seems preferable to raise the three regiments in this Presidency, as the Commander in Chief, Bombay, has frequently reported that it is difficult to get men to enlist on the silladar system, whereas in Bengal no such difficulties are experienced.

11. As regards British officers, the Commander in Chief thinks it will be sufficient to increase the present number by one squadron commander, which would make the establishment of each regiment—

Commandant	1
Squadron commanders	4
Squadron officers	4
Total Combatant Officers	9

12. Regarding the Bombay Cavalry, the Commander in Chief recommends that the six regiments should each consist of the following establishment:—

Ressaldars	4
Ressaidars	4
Ressaidar Woordie Major	1
Jemadars	8
Kote Duffadar Major	1
Farrier Major	1
Kote Duffadars	8
Duffadars	32
Trumpeters	8
Naiks	40
Sowars	518
Total	625

which is an increase on the present establishment of—

Ressaldar	1
Ressaidar	1
Jemadars	2
Kote Duffadars	2
Duffadars	2
Trumpeters	2
Naiks	10
Sowars	55
Total	75

13. The Commander in Chief will not at present deviate from the recommendations which have already gone home regarding the augmentation of the Madras Cavalry; but his Excellency is of opinion that it would be a preferable arrangement to add a fourth squadron to these corps also. The increase which has been recommended for each regiment is as follows :—

Naiks	6
Troopers	96
Total	102

14. The general result of the augmentations would be to give the following increase of cavalry strength:—

	Total Increase.
Bengal:	
17 regiments Bengal Cavalry, 4 regiments Punjab Frontier Force Cavalry, each to be increased by 75 men	1,575
2 regiments Central India Horse, increased by 132 men each	264
Bombay:	
6 regiments, each increased by 75 men	450
Madras:	
4 regiments, each increased by 102 men	408
3 new regiments in Bengal, of 625 men each	1,875
Total	4,572

15. Regarding the Native Infantry, and dealing with that of the Bengal Presidency first, we have at present two scales of establishment, viz. :—

Class A.—Ordinary Bengal Infantry.

Native officers	16
Havildars	40
Drummers	16
Rank and file	760
Total	832

Class B.—Goorkha and Assam Regiments.

Native officers	16
Havildars	40
Drummers	16
Rank and file	840
Total	912

Of Class A., we have—

	Regiments.
Bengal Infantry	37
Punjab Frontier Force, including the Guides Infantry	10
Total	47

Of

Of Class B., we have—

Goorkha regiments	5
Assam regiments	3
Total	8

Our present strength in infantry, therefore, is—

47 regiments, at 832 each	39,104
8 regiments, at 912 each	7,296
Total	46,400

16. The Commander in Chief recommends as follows:—

(1.) To increase the whole of the Bengal, Goorkha, and Punjab Frontier Force Infantry to the following regimental establishment, viz.:—

Native officers	16
Havildars	48
Naiks	48
Drummers	16
Sepoys	852
Total	980 Natives of all ranks.

(2.) To raise five new Goorkha battalions of 980 each.

(3.) To raise a new corps of Muzbee Pioneers, on the model of the 23rd and 32nd Pioneers, of 980 strong. His Excellency also recommends that, in order to have a greater number of this very useful class of regiments available for field service, two of the Hindustani Infantry regiments in Bengal, and two regiments of Bombay Infantry should be converted into pioneers. In the Madras Presidency two pioneer regiments already exist.

(4.) To raise three new battalions of Sikhs, each of 980 strong. The Commander in Chief selects Sikhs for the new regiments, not only on account of their superior fighting qualities, but also in consideration of the small number* of this class now serving in the Army, as compared with their numbers in the general population of the Punjab.

* Bengal Infantry	8,800
Punjab Frontier Force Infantry	2,600
	11,400

17. The adoption of these measures would give us the following strength of Native Infantry in the Bengal Presidency, viz.:—

55 existing regiments at a strength of 980 each	53,900
1 new pioneer battalion, 3 new Sikh regiments, 5 new Goorkha regiments — 9 regiments, at 980 men each	8,820
Total	62,720

That is, we should get an increase on the present establishment of 16,320 men.

18. In the Bengal Presidency, therefore, leaving out of consideration the local corps marginally named, which should be left at their present strength, we should get the following increase:—

Deoli Irregular Force.
Erinpura Force.
Meywar Bheel Corps.
Malwa Bheel Corps.
Bhopal Battalion.
Mhairwarra Battalion.
Nepal Residency.

In the Cavalry	3,714
In the Infantry	16,320
Total	20,034

19. In the Bombay Infantry the Commander in Chief recommends that the 26 regiments should all be raised from their present strength of 832 to the new establishment of 980 natives of all ranks, which would give a total increase of 3,848 men.

20. In the Madras Infantry the Commander in Chief does not propose to make any addition. That army is already of sufficient numerical strength for the duties it is called upon to perform, and there is no present urgent necessity which would warrant his Excellency in recommending the Government to incur the additional expense which an increase to it would cause.

21. It will now be convenient to summarise the proposals of the Commander in Chief as regards the Native Army. They are as follows:—

(1.) To increase the Native Cavalry in India by 4,572 men (paragraph 14).

(2.) To increase the Native Infantry in India by 20,168 men, thus giving a total increase to both arms of 24,740 men.

(3.) To give an additional squadron commander in 29* regiments of Native
*23 Bengal. | 6 Bombay. Cavalry.

(4.) To raise in Bengal the following new troops:—

3 regiments cavalry.
1 regiment pioneer.
5 regiments Goorkha (already sanctioned).
3 regiments Sikhs.

22. The Commander in Chief, after the most careful consideration of the subject, is of opinion that the increase to our military forces proposed in this letter is absolutely essential to render our position in India secure; and his Excellency earnestly trusts that these recommendations may meet with the approval of Government.

23. I will now proceed to submit, for the consideration of Government, a proposed alteration in the organisation of the Native Armies, the adoption of which would, in his Excellency's judgment, render them better able than at present to sustain the pressure caused by a serious and continued war.

24. The weak point in the present organisation is that the infantry regiment has nothing to fall back upon. It is a unit that stands by itself, and when a regiment takes the field there is no adequate means either to bring up its strength to a war establishment or to keep its ranks filled during the progress of the war. A system, in short, is required by which regiments may be put into the field at a proper strength, and maintained at that strength while on service.

25. This defect in the organisation of the Native Army has long been patent, and various schemes have been put forward to meet it by the establishment of some system of reserves. The Commander in Chief cannot say whether any of these schemes may be practicable, as without the test of actual experience no one can predict whether the sepoy who has left the colours would be willing to accept service as a reservist, or could be depended upon to come forward to rejoin his battalion in time of need.

28. But the Commander in Chief is fully prepared, if Her Majesty's Government should approve the proposals on the subject which have already gone home, to submit for consideration of Government a detailed scheme for the formation of a reserve, as an additional means towards maintaining regiments on a war footing while on service in the field. His Excellency is, however, very strongly of opinion that in a matter of such vital importance as the efficiency for war of the entire Native Army it would not be prudent in times such as the present to limit ourselves to experiments, and that it will be wise to devise a system by which that portion of the Army which takes the field may depend for immediate reinforcement and support upon the battalions which remain in quarters.

27. This end can best be met, in the Commander in Chief's opinion, by linking two or three battalions together as sister regiments, the corps which is put into the field drawing men from that which remains behind.

28. The plan thus proposed can be most easily explained by showing in some detail how it would work if its principles were applied to the Bengal Infantry.

29. (1.) All regiments to be linked (as sister battalions) either in the manner shown in Annexure A., by twos, or, as in Annexure B., by threes.

(2.) In detailing an army for field service, one of the sister battalions should always be left in cantonments.

(3.) When warned for service, a regiment should at once be made up to 1,000 *effective* rank and file by transfers from its sister battalions.

(4.) The establishment of the sister battalion or battalions should also be simultaneously raised to 1,000 rank and file.

(5.) The sister battalions would supply transfers of trained soldiers to fill the gaps in the ranks of the battalion on service during the continuance of the war.

(6.) The depôt of the battalion on service would, whenever practicable, be attached to one of the sister battalions in cantonments.

(7.) All enlistments in any battalion to be made in future for both or all three battalions; *i.e.*, a recruit enlisted in the 1st Bengal Infantry would at the time of enlistment be made to understand that he enlists also for the 2nd and 3rd Bengal Infantry, and was liable to transfer, in the event of war, to either of those regiments.

(8.) Beyond

(8.) Beyond this liability to transfer to a sister battalion during a war, the conditions of the sepoy's service to remain precisely as at present.

(9.) No alteration to be made in the numbers or designations of regiments; the only present change would be that all recruits would be enlisted with liability of transfer to their sister battalions, and a note would be added in the Army List to each regiment stating its sister battalions.

(10.) As the liability to transfer would only come into existence on one or two of the battalions being ordered on service, there would be no change whatever either in the organisation of regiments or in the conditions of the sepoy's service during peace-time.

30. By this system we should ensure a supply of trained soldiers, both to bring a battalion up to war strength and to replace its casualties in the field. The obvious objection to the system is, that by using a part of the Army as a means of supply for the other part, we have only a proportion of our strength really available for field service. But the Commander in Chief regards this objection as more theoretical than real. We must always keep at least a third of our army in garrison; and if the battalions in reserve are not depleted, but kept up to their proper strength of 1,000 rank and file, his Excellency does not anticipate that we should experience any practical inconvenience from depending for our first reserve on the ranks of the Army itself. At all events, the system has the advantage of supplying an assured reserve of trained and thoroughly effective soldiers for the immediate requirements of regiments placed on a war footing. If, in addition to this, it is decided to establish an army reserve of men who have served with the colours, we shall probably find no difficulty in maintaining battalions at full war strength.

31. The Commander in Chief recommends that the system of linked battalions should be applied to the Native Infantry of the three presidencies, and to that of the Punjab Frontier Force. His Excellency does not recommend that it should be also applied to the cavalry, as the organisation of silladar cavalry does not lend itself to such an arrangement.

ANNEXURE A. to Adjutant General's Letter.

Schedule of Regiments linked by Twos.

Bengal Infantry.

1st and 2nd.	23rd, 32nd, 34th (new pioneer regiment) } Pioneers.
3rd „ 4th.	24th and 25th.
5th „ 6th.	26th „ 27th.
7th „ 8th.	28th „ 29th.
9th „ 10th.	30th „ 31st.
11th „ 12th.	33rd „ 38th.
13th „ 16th.	39th „ 40th.
14th „ 35th (new Sikh regiment).	42nd, 43rd, 44th } Assam regiments.
15th „ 36th (ditto).	45th and 37th (new Sikh regiment).
17th „ 18th.	
19th „ 22nd.	
20th „ 21st (these two regiments enlist Afridis).	

Punjab Frontier Force.

1st and 2nd Sikhs.	4th, 5th, 6th } Punjab Infantry.
3rd „ 4th „	The Guides.
1st „ 2nd Punjab Infantry.	

ANNEXURE B.

Schedule of Regiments linked by Threes.

Bengal Infantry.

1st, 2nd and 3rd.	25th, 27th and 28th.
4th, 5th „ 6th.	29th, 30th „ 31st.
7th, 8th „ 9th.	14th, 15th „ 45th (Sikhs).
10th, 11th „ 12th.	39th „ 40th.
13th, 16th „ 17th.	23rd, 32nd „ 34th* (new*) Pioneers.
18th, 33rd „ 38th.	42nd, 43rd „ 44th (Assam).
19th, 22nd „ 24th.	35th, 36th „ 37th (all new) Sikh regiments.
20th, 21st „ 26th.	

Punjab Frontier Force.

1st, 2nd and 3rd Sikhs.	5th and 6th Punjab Infantry.
1st, 2nd „ 4th Punjab Infantry.	The Guides.
4th Sikhs.	

APPENDIX (A.)—[Paragraph 39 of Letter].

From Colonel *M. W. Willoughby*, Secretary to the Government of Bombay, Military Department, to the Secretary to the Government of India, Military Department (No. 3752, dated Bombay Castle, 6th July 1885).

WITH reference to the correspondence ending with your letter, No. 59-S-B. (Organisation), dated 28th April 1882, I am directed to forward herewith, for the consideration and orders of the Government of India, a copy of a letter from the Adjutant General, No. 35-2-C.—6419, dated 22nd June 1885, re-submitting the proposals regarding the reorganisation of the infantry of the Bombay Army in regiments of three battalions each, which, consequent upon the disbandment of certain regiments of the Bombay Army, his Excellency the Commander in Chief then recommended for the consideration of Government.

2. A copy of the Adjutant General's letter, No. 5-C-T., dated 25th March 1882, referred to in paragraph 2 of that officer's letter quoted above, accompanies.

From Brigadier General *A. L. Annesley*, Adjutant General, Bombay Army, to the Secretary to the Government of Bombay, Military Department (No. 35-2-C.—6419, dated Poona, 22nd June 1885).

ADVERTING to Government Resolutions, Nos. 1874, of 5th April 1882, and 2432, of 9th May 1882, I am directed by the Commander in Chief to re-submit the proposals which, consequent upon the disbandment of certain regiments of this army, he then recommended to the attention of Government, as it appears to his Excellency not improbable that the Government of India may be disposed to give them from altered circumstances a further consideration.

2. His Excellency desires particularly to draw attention to paragraph 12 of my letter, No. 5-C-T., of 25th March 1882 (extract attached), which refrains from advising that a strictly regimental promotion as regards British officers should ensue from this amalgamation, as the experience derived from the custom of the three regiments of Sind Horse, where this principle for a time obtained, produced anything but satisfactory results. The 24 officers, who would thus become the quota of an enlarged regimental organisation, would not, his Excellency is satisfied, afford a sufficient field for selection to provide three commandants, three seconds in command, and three adjutants of exceptional ability; and any rapid run of promotion, such as must be caused by active service, would promote officers to regimental positions so much at variance with their army rank as to become embarrassing in regard to army discipline, if the rule of regimental promotion was made more than a desirable enhancement of regimental continuity.

3. I am to point out that the only expense chargeable to the public revenues in connection with this scheme would be the equipment of two battalions as rifles, and the small outlay consequent on a change of facings and puggries in certain other linked battalions.

EXTRACT Paragraph 12 of the Adjutant General's Letter, No. 5-C-T., dated 25th March 1882, to the Secretary to the Government of Bombay, Military Department.

Para. 12. IT would, in his Excellency's opinion, be quite beyond the range of the present proposal to alter any of the existing rules of promotion, or to extend it regimentally, so as to contract that field of selection by which the efficiency of battalions is strengthened. The suggestion is limited to a fresh arrangement in the telling off of regiments; and if palpable advantages can be secured from this opportunity, whilst regimental susceptibilities are also considered, without any increase of expenditure, and with a reasonable promise of augmented efficiency, it is certainly, in his Excellency's opinion, an opportunity which should not be overlooked.

From Brigadier General *A. L. Annesley*, Adjutant General, Bombay Army, to the Secretary to the Government of Bombay, Military Department (No. 5-C-T., dated Poona, 25th March 1885) (Confidential).

WITH reference to Government Resolution, No. 1362, dated Bombay Castle, 14th March 1882, I have the honour, in obedience to the instructions therein contained, to submit the views of his Excellency the Commander in Chief on the proposal contained in letter, No. 179-B., Government of India, Military Department, dated Fort William, 11th March 1882.

2. His Excellency the Commander in Chief submits that the regiments of the Bombay Army to be reduced should be as follows:—

Cavalry:

3rd Sind Horse.

Infantry:

The 6th Native Infantry.
The 11th Native Infantry.
The 15th Native Infantry.
The 18th Native Infantry.

3. His Excellency's reasons for this selection are as follows: that the 3rd Sind Horse is the junior regiment of the Bombay Cavalry as well as of a brigade, whose conditions of enlistment, involving permanent quarters at Jacobabad, have become ill-suited to general service.

The above procedure (selecting the junior regiment) cannot, however, be extended to the infantry without disbanding the 27th, 29th, and 30th regiments; these are Biluch regiments, and of them the two first have a valuable character; the third (late Jacob's Rifles), though it has not equal claim to consideration on the score of efficiency, enjoys advantages for recruiting, and a promise of equal efficiency in the future with the 1st and 2nd Biluchis. His Excellency would not, therefore, desire to terminate its recent reconstruction.

1st, 2nd, 3rd Biluch Regiments.

The 28th, 26th, 25th, and 24th are regiments of good service and of good repute, and the 24th is serving in the Quetta Brigade. It seems, therefore, undesirable to apply to them a principle which has been surrendered in regard to the Biluch regiments, so that selection, based upon records of service and present efficiency, influenced also by financial convenience when the claims of regiments are perplexingly balanced, remains the only alternative of an invidious decision.

The regiments with least field service are the 6th, 11th, 14th, 15th, 16th, 17th, 18th, and 22nd. The 22nd has just gone to Aden, which would complicate its disbandment.

The 14th and 16th are regiments of superior physique; the 17th is very favourably reported on, and his Excellency therefore considers that those already noted can be best spared consistently with public interests, which have exercised full weight in this conclusion.

4. The selection of regiments for reduction will entail a very general re-numbering of regiments, and this will be a greater grievance to those thus affected if accident exempts others from a similar change. His Excellency the Commander in Chief therefore suggests for consideration that no organisation could be better suited to the peculiarities of

Indian service than Native Infantry regiments composed of three battalions. It would rarely be prudent to withdraw more than one-third of the native troops, and more than half of the English force from garrison duties; and this proportion coincides with the contingent of 10,000 to 12,000 men which Bombay is calculated to contribute to an Indian army in the field.

5. Twenty-four Native Infantry battalions incorporated into eight regiments would thus put eight battalions, the fittest for service, at once with the first line. Each such battalion would in war be backed up by a reserve of two battalions, and would leave its sick, its recruits, its families, with the nearest reserve battalion without any of the expense and mismanagement which is the inevitable result of Native Infantry depôts.

6. Such a system as that herein proposed would be an assurance to the Army at large that at the first call for service each regiment would be fairly represented in the force by its best battalion at the time, thus stimulating not only greater emulation in the field between regiments, but within them supplying an incentive to the greatest efficiency. His Excellency considers the advantages of the system incontestable from a military point of view, provided it can be adapted to the Staff Corps system.

7. His Excellency would further point out that within this Presidency there are eight English regiments of infantry. Number of the native battalions, exclusive of one battalion at Aden, and the Marine battalion in Bombay, will be henceforward 24 battalions thus classified:—

2 Grenadier battalions.	3 Biluch battalions.
5 Light Infantry battalions.	13 Line battalions.
1 Rifle battalion.	

8. His Excellency would propose to add a good line battalion (the 19th) to the two Grenadier battalions, and form these three into the first regiment; also to assimilate the 3rd and 5th Light Infantry to the 4th Rifles; these would form the second regiment; the remaining three regiments of Light Infantry would form the third regiment.

The three Biluch battalions to form the fourth regiment.

The remaining twelve battalions to be divided into groups of three, and to compose four regiments, viz., the 5th, 6th, 7th, and 8th, preserving their present precedence as follows:—

5th Regiment	- - - - - -	7th	8th	9th
6th Regiment	- - - - - -	12th	13th	14th
7th Regiment	- - - - - -	16th	17th	20th
8th Regiment	- - - - - -	22nd	24th	26th

9. With regard to the regiments which remain over, his Excellency would propose to add the 28th Regiment Native Infantry as a fourth battalion to the proposed eighth regiment, by which arrangement a ninth battalion could, if necessary, be placed in the field, leaving two battalions in reserve. The Marine battalion, whose duties are specific, would remain single, and not numbered.

10. His Excellency desires me to point out that as at Quetta, Poona, Mhow, Bombay, and Belgaum two or more Native Infantry battalions serve together, the usual rotation of relief would not unfrequently bring together at the same station battalions of the same regiment, which would go far to cement regimental sympathies amongst the men, which must facilitate, simplify, and cheapen volunteering on emergency. It would also in a degree mitigate the hardship of unexpectedly shifting officers to regiments with which they have no connection, and would periodically afford them the option of a combined regimental mess.

11. Thus eight Native Infantry battalions at 832 (total 6,656), four European regi-
10,200 infantry. ments at 886 (total 3,544), together with the proper proportion of cavalry and artillery, would make a compact division with great vitality of resource and elasticity of development.

12. It would, in his Excellency's opinion, be quite beyond the range of the present proposal to alter any of the existing rules of promotion, or to extend it regimentally so as to contract that field of selection by which the efficiency of battalions is strengthened. The suggestion is limited to a fresh arrangement in the telling off of regiments; and if palpable advantages can be secured from this opportunity, whilst regimental susceptibilities are also considered, without any increase of expenditure, and with a reasonable promise of augmented efficiency, it is certainly, in his Excellency's opinion, an opportunity which should not be overlooked.

13. With regard to the stations which should, in consequence of the proposed reductions, be reduced or abandoned, his Excellency is of opinion that, both from a military and political point of view, the following arrangement is desirable, with one exception, however,

however, namely, the retention of Bhuj, which, from a military point of view, his Excellency does not consider necessary or even advisable :—

Bombay, detachment Tanna	2 battalions	Augur ½	1 battalion
Poona	3 battalions	Mehidpur ½	
Mhow 1½	2 battalions	Nasirabad	1 battalion
Indore ½		Bhuj	1 battalion
Deesa	1 battalion	Rajkot, detachment Dwarka	1 battalion
Belgaum	2 battalions	Ahmedabad	1 battalion
Satara ½	1 battalion	Baroda, detachment Surat	1 battalion*
Dharwar ½		Karachi	1 battalion
Ahmednagar	1 battalion	Hyderabad	1 battalion
Aden	1 battalion	Jacobabad	1 battalion
		Quetta District	4 battalions

Total - - - 26 battalions.

14. The stations his Excellency proposes to abandon for Native Infantry are Malegaon, Sholapur, Kaladghi, Sadra, Neemuch ; and those where a diminution of garrison is recommended are Baroda, six companies in place of eight; Bombay, 15 companies in place of 20 ; Dharwar, four companies in place of eight; Surat, three companies in place of eight companies : and Ahmedabad, eight companies in place of 15 companies.

* The increased strength of regiments will admit of the detachment being furnished without a diminution of Baroda garrison.

APPENDIX (B.)—[Paragraph 12 of Letter.]

Established Strength of British Troops in India.

1860	83,161	1873	60,452
1861	74,425	1874	60,435
1862	69,324	1875	60,432
1863	69,363	1876	60,409
1864	69,646	1877	60,398
1865	67,131	1878	60,341
1866	62,454	1879	60,329
1867	62,210	1880	60,300
1868	62,350	1881	60,297
1869	61,995	1882	59,458
1870	60,425	1883	59,531
1871	60,453	1884	59,372
1872	60,417	1885	59,371

APPENDIX (C.)—[Paragraph 64 of Letter.]

Proposal of Army Commission regarding Creation of an Army Reserve.

258. The want of some system of reserves for India has often been felt, and the subject has been brought forward from time to time. The success of the German system has shown that the existence of army reserves gives an immense, and at the same time an economical, increase to the military power of a nation. Lord Napier of Magdala recommended the formation of reserves for the Indian Army when he was Commander in Chief. His Excellency Sir Frederick Haines concurred in Lord Napier's opinion as to the

the necessity for forming a reserve. The Bombay Government also accepted the views of Excellency Sir Charles Staveley, then Commander in Chief of Bombay, that the State ought to retain a lien on the services of pensioned soldiers. Nearly all the regimental officers of the Bengal and Punjab armies, especially those who were engaged in the Afghan campaign of 1878, are convinced that some system of reserve is needed, by means of which regiments ordered into the field can obtain at once a supply of disciplined soldiers to fill vacancies caused by casualties, and to take the places of invalids or others sent to the depôt. As has been stated above, the officers of the Madras and Bombay Army Corps hold that drafts from linked or other battalions can best supply this need. Officers of the two Northern Army Corps, on the other hand, say that some system of regimental reserves ought to be established, under which disciplined and effective reservists could be recalled to the colours at a week's notice. They report, moreover, that such a system of reserves, if combined with localised recruiting grounds and fixed regimental depôts, would be most popular with the best fighting races of which the northern armies are composed.

259. There can be little doubt that the maintenance of army reserves in India would greatly increase the offensive and defensive power of the Indian Army. At the same time, it must be remembered that our Native Army is a mercenary force, serving an alien Government. Even if it were desirable, it would not be possible to impose compulsory service in the army of reserve on any large section of the population. And it would be politically inadvisable to adopt for India the short-service system of Europe, whereby the largest possible number of men are passed through the army, returned into the general population, and are kept, by periodical training, in a state of military efficiency. There can be no advantage, and there might be much risk, in scattering hundreds of thousands of trained reservists over the several provinces of India. The services of such large numbers would never be needed, and the cost of their maintenance would be very great. Under the present system, however, a considerable number of trained soldiers already pass from our army annually into the general population. According to the returns for five years, 7,778 native soldiers leave the army annually, of whom 4,612 retire on pension. Thus, in 10 years time nearly 80,000 trained native soldiers returned to their homes. Any plan which retained a proportion of these 80,000 men in army reserves, and bound them to the British Government by sufficient money payments, would meet the requirements of our military system without increasing the number of trained soldiers annually absorbed in the general population.

260. We attach great importance to the opinions of so many distinguished soldiers, and of so many experienced regimental officers, in favour of a reserve system. At the same time we recognise a distinct political danger in any indefinite increase of the number of trained soldiers passed annually into the population of India. We consider however that the provision of efficient reserves can well be combined with some revision of the pension rules. We propose that a strictly limited reserve of 200 men to every infantry regiment be eventually maintained. The reserve would consist of privates, inhabitants either of British territory or of States within the frontier of British India, who, after 12* years' service with the colours with good character, might choose to pass into the reserve. They would receive a reserve pay of four rupees a month, payable half-yearly; they would belong to the first reserve till they reached 21 years' service. During their service in the first reserve, they would be liable to embodiment for two months in every two years, and to service with the colours whenever summoned. They would receive, during the period of their embodiment, in addition to reserve pay, the full pay and good-conduct pay which they might have been drawing when they joined the reserve. At 21 years' service they would pass to the pension list or second reserve, where they would continue to receive a pension of four rupees a month, and would be liable for service on garrison duty only when summoned. After 32 years' service they should be liable for no further service, but would enjoy their pension of four rupees a month for the remainder of their lives. It would rarely be necessary to exercise or embody the second reserve; but they could, in time of necessity, usefully take garrison duty in cantonments or fortresses. The first reserve would be embodied at the regimental depôts, and their two months' exercise would include rifle practice. A British officer, with sufficient strength of Native officers and non-commissioned officers, and a medical subordinate, would be deputed to the depôt from the regiment once in two years to exercise the reserves. The second reserve, when called out, would be armed from the nearest depôt or arsenal. As the first reserves of different regiments would be called up for embodiment in alternate years at the time of year least inconvenient for agricultural operations, arms, uniform, and accoutrements for 200 men would suffice for the reserves of two regiments; and therefore one-half only of the reserve equipments need be kept at the depôts in custody of the native regiment cantoned at the depôt head-quarters, the remainder being kept at the nearest arsenal. Reservists on embodiment for exercise would be sheltered in standing camps whenever the depôt buildings and huts did not furnish sufficient accommodation.

* Twelve years is named as the period before which a soldier should not be passed into the reserve. But the Commission feel that this term should be open to reconsideration at special times, and for special reasons.

261. We do not propose to constitute any first reserves of cavalry, because we consider that the country cannot afford to maintain a large reserve of horses. Native cavalry

cavalry reservists, who had no exercise with their horses, would soon become inefficient. We think, however, that the change in the pension rules, and the liability to garrison service in the second reserve, should for the future apply to cavalry as well as to infantry.

APPENDIX (D.)—[Paragraph 66 of Letter.]

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 2352-B., "Native Army, Organisation," dated Simla, 28 July 1885.)—(Confidential).

In continuation of paragraph 26 of this office letter No. 2009-B. of 3rd July, and with advertence to the instructions contained in your No. 479-B. of 20th July, I am directed by the Commander in Chief to submit, for the orders of the Government of India, the following scheme for the formation of a reserve for the Native Army:—

(1.) Each regiment of infantry to have a first reserve limited to 200 men.

(2.) This 1st Reserve to be composed of men of under 12 years' service, and who, after a service of not less than three years with the colours, volunteer for transfer to the Reserve.

(3.) Only men physically fit, and who may be approved by their commanding officers, to be allowed to join the Reserve.

(4.) The Reserve to be formed gradually; and in order to avoid impairing the efficiency of regiments, no men should be passed into the Reserve if the corps is more than 10 per cent. below its established strength, including recruits.

(5.) Commanding officers should be empowered to enlist in the 1st Reserve any suitable men who may have already taken their discharge from the service.

(6.) Men of the 1st Reserve to be liable for field service.

(7.) If the scheme for linking battalions proposed in paragraphs 27 30 of this office letter No. 2009-B. of 3rd July is approved by Government, the men of the 1st Reserve should be liable for field service with any one of the sister battalions.

(8.) Each regiment to have also a 2nd Reserve, to be composed of men physically fit for garrison duty, who take their discharge from the service between 40 and 50 years of age, and of transfers from the 1st Reserve on completing a total service of 21 years.

(9.) The 2nd Reserve to be unlimited in number, but no man to be retained in it who has completed 32 years' service since date of first enlistment, or who is not in all respects fit for the performance of garrison duty.

(10.) Men of the 2nd Reserve not to be liable for field service, but only for garrison duty.

(11.) Men of both reserves to receive pay, while at their homes, at the following rates:—

	Rs.	*a.*	*p.*	
Sepoys - - - - - -	3	8	–	a month.
Havildars and naiks - - - -	4	–	–	"

(12.) When embodied for training, or called to join their battalions during a war, reserve men to receive the full pay, with good conduct pay, which they were drawing when passed into the Reserve.

(13.) Payments to reserve men to be made once a year in arrears when they are called out for training; thus, on the men being mustered, each sepoy would receive 10 rupees for his current expenses, and the balance (32 rupees) on the conclusion of the training.

(14.) If the proposals for linking battalions are adopted, the Commander in Chief would further recommend that a head-quarter station should be allotted to each group of linked battalions, at which one of the three battalions should always be quartered, and at which it would probably be found convenient to place the depôts of the battalion or battalions in the field.

The stations could be allotted somewhat as follows :—

1st, 2nd, 3rd	Meerut.
4th, 5th, 6th	Cawnpore.
7th, 8th, 9th	Lucknow.
10th, 11th, 12th	Fyzabad.
13th, 16th, 17th	Allahabad.
18th, 33rd, 38th	Benares.
39th, 40th	Dinapore.
19th, 22nd, 24th	Jhelum.
25th, 27th, 28th	Umballa.
29th, 30th, 31st	Sialkot.
20th, 21st, 26th	Rawalpindi.
14th, 15th, 45th	Ferozepore.
35th, 36th, 37th (all new regiments)	Jullundur.
23rd, 32nd, 34th* (new*) regiments	Lahore.

(15.) The men of both reserves to be embodied for training for one month in each year at such season as agriculturists can best be spared from their fields. The training, when practicable, to be carried out at the head-quarter station of the linked battalions, or by the battalions to which the men belong, the principle being observed that the reserve men should be trained as near as possible to their own homes.

(16.) If necessary, officers from regiments quartered at stations where but few reserve men assemble for training could be detached to stations where the numbers are larger for the period of the annual training.

(17.) Free railway passes and marching allowance to be given to men going to and returning from the annual training.

(18.) The arms and accoutrements of reserve men to be kept at the stations at which they assemble for their annual training. Special arrangements will have to be made for their proper charge and security.

(19.) The records and documents of reserve men to be kept at the headquarters of the battalion to which they belong.

(20.) Reserve men to get an allowance of two rupees a year to aid them in keeping up a suit of uniform in serviceable order: the uniform to consist of a regimental turban, a khaki blouse, a khaki pair of pyjamas, putties, and a pair of native shoes. Great-coats, havresacks, and water-bottles should be supplied to men by Government when called up for field service.

(21.) All reserve men to be medically examined before they are dismissed from the annual training; when any short service men found unfit should be discharged with gratuity proportional to their length of service as follows, viz.:—

Five years' and under 10 years' service	3 months' pay.
Ten years' and under 15 years' service	6 „ „
Fifteen years' and under 20 years' service	9 „ „
Twenty years' and under 25 years' service	12 „ „

(22.) Men of 25 years', but under 32 years' service, should be granted a modified pension.

(23.) Reserved non-commissioned officers to be allowed at the following rates for every 100 reservists:—

Four havildars	at 4 rupees a month.
Four naiks	at 4 „ „

These men would be liable for field service, if belonging to the 1st Reserve; but it would probably be found advantageous to retain them at the depôts for training or enlisting recruits.

(24.) As it is very desirable to render reserve service popular, the Commander in Chief recommends that it would be allowed to qualify for pension, reserve men being entitled to pension after 32 years' service.

(25.) The Commander in Chief is of opinion that the present invalid pension after 15 years' service should be abolished, but would recommend that the native soldier

soldier should be entitled to the ordinary pension of his rank after 21 years' service with the colours.

(26.) The reserve system, as above detailed, to be applied to the Sappers and Miners, Native mountain batteries, and Native cavalry: the two former having a reserve of 25 per cent. on their established strength, and the cavalry having a reserve of from 50 to 100 men for each regiment.

Appendix (E.)—[Paragraph 71 of Letter.]

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department—(No. 2204-B.—"Native Army,"—dated Simla, 16th July 1885.)

I AM directed by the Commander in Chief to submit, for the favourable consideration of the Government of India, whether, in order to increase the popularity of military service among the people of this country, it would not be advisable to grant free passage by railway to native and non-commissioned officers and men of the Native Army proceeding to or returning from their homes on furlough for such part of the journey as railway transit is available.

2. As the Native Army is at present constituted, it is impossible to avoid quartering men at considerable distances from their homes: and thus it happens that natives of Oudh are found serving at Peshawar, and natives of the Punjab at Allahabad or Calcutta. On such men the travelling expenses to which they are put when visiting their homes on furlough fall very heavily. The railway fare from Lucknow to Peshawar is *Rs.* 11. 6. 0.; and thus a sepoy at Peshawar on seven rupees a month going to his home in Oudh on 3½ months' furlough actually has to pay more for his railway fare than he can receive as pay during the entire period of his absence.

3. It has frequently been recommended to the Commander in Chief that the Government should be asked to assist native soldiers towards defraying the expenses of their furlough journeys, and Colonel Norman's committee in 1882 suggested that free passes should be granted to all men serving at a distance of 700 miles or more from their homes; but his Excellency has hitherto refrained from making any proposals on the matter, because it seemed impossible to draw any line between the men who should get free passes and those who should not.

4. In view however of the necessity that now exists, and will continue to exist, for rendering military service popular among the classes from which our native soldiery are drawn, the Commander in Chief is of opinion that the time has now come for the Government to take this matter in hand, and his Excellency recommends that free passes should be granted to all native soldiers on *furlough*, men going on temporary leave continuing to pay their own expenses.

5. The distinction between furlough and temporary leave is well known in the army, and the Commander in Chief feels assured that, if the Government see fit to grant this boon, it will remove what is now felt to be a distinct grievance, and will go far to render service in the ranks of the British Army popular. Free ration and free travelling are tangible advantages that the natives of India will not be slow to appreciate; and though the former would be too costly a measure to be considered at present, his Excellency believes that the latter might be granted with but small actual expense to the State.

APPENDIX F.—[Paragraph 72 of Letter.]

BENGAL CAVALRY..

LENGTH of SERVICE of the Non-Commissioned Officers and Rank and File, compiled from the Inspection Returns for 1884-85.

REGIMENTS.	Under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 32 years.	Above 32 years.	TOTAL.
1st Bengal Cavalry - -	133	174	103	86	24	11	6	-	
2nd „ - -	179	130	100	74	17	22	6	-	
3rd „ - -	175	172	118	56	6	10	-	-	
4th „ - -	158	143	100	72	45	14	2	3	
*5th „ - -	154	157	119	62	24	18	1	2	
6th „ - -	233	124	82	48	15	29	-	3	
7th „ - -	176	186	59	83	11	19	1	-	
8th „ - -	112	204	153	47	10	8	2	-	
9th „ - -	230	144	71	40	33	12	-	-	
10th „ - -	183	167	100	45	17	13	1	-	
11th „ - -	174	185	73	67	23	15	-	-	
12th „ - -	234	147	104	28	6	16	2	1	
13th „ - -	221	150	92	34	20	20	-	-	
14th „ - -	229	140	65	63	27	12	-	-	
15th „ - -	212	126	78	61	34	24	1	-	
18th „ - -	171	180	131	40	8	4	1	2	
19th „ - -	261	104	91	53	19	9	-	-	
TOTAL - - -	3,235	2,633	1,639	965	339	256	23	11	9,101
Percentage - - -	35·54	28·93	18·00	10·60	3·72	2·81	·25	·12	-

* Taken from the returns for 1883–84.

BENGAL INFANTRY.

LENGTH of SERVICE of the Non-Commissioned Officers and Rank and File, compiled from the Inspection Returns for 1884-85.

REGIMENTS.	Under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 32 years.	Over 32 years.	TOTAL.
1st Infantry - - -	357	225	117	80	8	2	–	2	
2nd „ - - -	279	151	113	197	33	11	–	5	
3rd „ - - -	86	363	173	108	77	3	2	4	
4th „ - - -	180	344	206	51	13	–	–	1	
5th „ - - -	441	140	110	75	43	–	–	–	
6th „ - - -	318	197	175	88	15	11	–	3	
7th „ - - -	175	345	165	91	13	13	–	–	
8th „ - - -	249	233	172	93	48	5	–	–	
9th „ - - -	260	314	141	81	19	1	–	–	
10th „ - - -	209	388	122	66	19	2	2	–	
11th „ - - -	230	272	166	113	32	1	1	–	
12th „ - - -	279	328	131	51	4	–	–	–	
13th „ - - -	362	246	129	68	9	1	–	1	
14th „ - - -	302	279	176	54	5	1	–	–	
15th „ - - -	386	190	167	51	13	1	–	–	
16th „ - - -	292	330	77	71	29	8	–	–	
17th „ - - -	378	215	129	73	15	3	1	1	
18th „ - - -	200	317	141	125	14	4	2	–	
19th „ - - -	337	218	164	75	20	1	1	–	
20th „ - - -	427	194	115	46	18	1	–	–	
21st „ - - -	335	249	141	47	24	1	–	–	
22nd „ - - -	413	200	126	48	4	2	–	–	
23rd „ - - -	290	232	145	80	26	11	–	1	
24th „ - - -	428	172	132	43	18	14	–	1	
25th „ - - -	335	229	192	48	4	2	–	–	
26th „ - - -	392	210	117	43	12	6	–	–	
27th „ - - -	363	208	167	64	7	5	–	–	
28th „ - - -	376	230	130	49	17	7	1	–	
29th „ - - -	390	243	119	42	3	5	–	–	
30th „ - - -	314	208	143	110	15	3	1	–	
31st „ - - -	451	164	86	99	11	3	–	–	
32nd „ - - -	193	241	139	110	60	22	4	1	
33rd „ - - -	369	156	181	52	27	5	–	–	
38th „ - - -	396	361	25	16	1	–	–	–	
39th „ - - -	253	306	141	111	2	3	–	–	
40th „ - - -	232	189	254	111	22	–	–	–	
42nd „ - - -	399	266	139	73	17	1	–	–	
43rd „ - - -	367	197	119	93	3	–	–	–	
44th „ - - -	532	181	106	65	3	2	–	–	
45th „ - - -	353	189	186	67	7	–	–	–	
1st Goorkhas - - -	440	246	146	59	17	6	3	1	
2nd „ - - -	423	209	128	66	47	48	–	–	
3rd „ - - -	420	188	143	133	13	1	–	–	
4th „ - - -	464	211	122	74	41	6	–	–	
Sappers and Miners - -	538	238	168	160	20	6	–	–	
TOTAL - -	15,213	10,812	6,354	3,520	868	228	18	21	37,044
Percentage - -	410·6	29·21	17·15	9·50	2·34	·61	·04	·05	

BOMBAY ARMY.

LENGTH of SERVICE of Non-Commissioned Officers, and Rank and File, compiled from the Inspection Returns for 1884-85.

REGIMENTS.	Under 5 years' service.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 32 years.	Over 32 years.	TOTAL.
Body Guard - - -	1	5	11	1	17	21	1	1	
1st Cavalry - - -	225	100	72	73	39	13	6	–	
2nd „ - - - -	153	174	40	52	64	38	–	–	
3rd „ - - - -	245	113	76	50	25	20	4	2	
Poona Horse - - -	190	116	80	63	38	44	15	–	
1st Sind Horse - - -	130	189	115	16	32	23	10	–	
2nd „ - - -	153	198	107	36	15	2	–	–	
Aden Troop - - -	20	20	22	22	5	7	–	–	
1st Infantry - - -	517	154	79	46	6	2	3	–	
2nd „ - - -	323	226	119	65	19	16	1	1	
3rd „ - - -	181	218	194	68	37	25	4	3	
4th „ - - -	352	211	85	105	19	14	1	–	
5th „ - - -	263	231	174	71	15	31	1	–	
7th „ - - -	233	277	138	110	25	6	4	1	
8th „ - - -	333	201	153	65	13	5	1	–	
9th „ - - -	201	308	157	107	35	38	2	1	
10th „ - - -	188	248	266	56	35	6	–	–	
12th „ - - -	349	178	125	60	25	4	2	–	
13th „ - - -	281	203	105	125	30	27	21	–	
14th „ - - -	265	265	126	88	25	21	2	1	
16th „ - - -	317	216	98	121	12	18	2	–	
17th „ - - -	331	180	138	86	43	23	2	1	
19th „ - - -	179	251	164	31	99	19	31	3	
21st „ - - -	225	237	170	98	53	25	1	–	
22nd „ - - -	256	278	99	91	33	29	3	–	
23rd „ - - -	361	193	134	89	18	–	–	–	
24th „ - - -	314	209	167	96	11	2	2	–	
25th „ - - -	202	188	235	137	19	23	5	–	
26th „ - - -	386	157	155	43	18	10	1	–	
27th „ - - -	341	221	117	62	30	6	1	–	
28th „ - - -	235	212	145	151	23	14	3	2	
29th „ - - -	391	137	133	48	55	8	3	1	
30th „ - - -	452	209	91	24	–	–	–	–	
Sappers and Miners - -	206	115	60	56	16	8	2	–	
TOTAL - - -	8,809	6,438	4,150	2,412	949	558	134	17	23,467
Percentage - - -	37·49	27·43	17·68	10·27	4·04	2·37	·57	·07	

MADRAS ARMY.

LENGTH of SERVICE of Non-Commissioned Officers and Rank and File, compiled from the Inspection Returns for 1884-85.

REGIMENTS.	Under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 32 years.	32 to 35 years.	Over 35 years.	TOTAL.
1st Cavalry - -	127	132	20	11	23	16	8	2	1	
2nd „ - -	–	–	–	Returns not available.			–	–	–	
3rd „ - -	94	146	11	25	44	17	2	2	1	
4th „ - -	86	172	9	12	18	8	9	2	–	
1st Infantry - -	193	255	104	73	36	79	31	2	–	
2nd „ - -	–	–	–	Returns not available.			–	–	–	
3rd „ - -	122	229	167	107	34	86	9	2	–	
4th „ - -	–	–	–	Returns not available.			–	–	–	
5th „ - -	367	169	109	54	54	54	6	–	–	
6th „ - -	233	289	148	69	25	35	14	2	2	
7th „ - -	289	152	152	61	30	110	6	2	–	
8th „ - -	310	160	189	81	32	32	1	1	–	
9th „ - -	207	251	183	90	11	45	9	1	–	
10th „ - -	378	148	85	76	36	52	14	3	–	
11th „ - -	263	250	169	67	42	55	2	–	4	
12th „ - -	216	227	213	62	32	49	10	–	–	
13th „ - -	255	173	101	142	49	74	6	3	1	
14th „ - -	271	166	140	95	86	49	6	–	1	
15th „ - -	204	185	151	123	51	71	9	4	–	
16th „ - -	267	161	153	95	47	66	15	3	–	
17th „ - -	296	194	113	112	34	38	12	6	–	
19th „ - -	247	188	144	75	30	84	3	1	–	
20th „ - -	155	234	159	136	70	57	11	2	–	
21st „ - -	362	159	105	97	25	51	5	6	–	
22nd „ - -	274	223	149	84	38	40	8	1	–	
23rd „ - -	279	162	166	79	74	46	3	6	–	
24th „ - -	335	247	113	64	23	22	4	4	–	
25th „ - -	255	210	142	105	18	71	5	1	2	
26th „ - -	311	164	116	83	31	90	11	1	–	
27th „ - -	–	–	–	Returns not available.			–	–	–	
28th „ - -	222	303	221	113	19	53	8	13	–	
29th „ - -	224	242	97	71	41	108	25	4	–	
30th „ - -	330	143	147	67	46	66	10	1	–	
31st „ - -	362	147	144	80	31	36	7	2	–	
32nd „ - -	279	192	107	101	46	68	7	3	–	
33rd „ - -	236	143	139	119	91	49	6	8	–	
TOTAL - - -	8,049	6,216	4,166	2,609	1,267	1,777	262	88	12	24,446
Percentage - -	32·92	25·42	17·04	10·67	5·18	7·26	1·07	·75	·04	

Appendix (G.)—[Paragraph 63 of Letter.]

STATEMENT showing the Approximate Annual Cost of the Increase to the British Army in India, as proposed by the Commander in Chief in India.

		Rs.
1.	The annual cost of augmenting the strength of a British cavalry regiment by one squadron (148 men) to a total strength of 602 of all ranks, exclusive of officers, would be 1,49,500 rupees per regiment, and for the nine regiments of cavalry serving in India the total additional expenditure would be (inclusive of one major, one captain, and four lieutenants for fourth squadron)	13,45,500
2.	The annual cost of one regiment of British cavalry with four squadrons would be	7,07,000
3.	The annual cost of augmenting the strength of a battalion of British infantry by 180 privates, or from 884 to 1,064 of all ranks (exclusive of officers), would be 79,000 rupees per battalion, and for the 50 battalions serving in India the total expenditure would be	39,50,000
4.	The annual cost of four battalions of British infantry at the proposed increased strength would be at 6,63,000 rupees per battalion	26,52,000
5.	The annual cost of seven batteries of Royal Artillery would be:—	
		Rs.
	For one battery of horse artillery	2,02,000
	For two batteries of field artillery, at 1,74,000 rupees each	3,48,000
	For four batteries of garrison artillery, at 95,000 rupees each	3,80,000
		9,30,000
	Total Annual Cost of proposal	95,84,500
	In round Numbers *Rs.*	95,85,000

Probable ANNUAL COST of the Augmentation of Native Cavalry in India, as proposed by the Commander in Chief in India.

		Rs.
1.	The annual cost of augmenting the strength of a Native cavalry regiment, Bengal and Punjab Frontier Force, to four squadrons, or by 75 men of all ranks, would be 41,600 rupees, and for the 17 Bengal and the four Punjab regiments, or in all 21 regiments, the total cost would be (inclusive of one extra squadron commander per regiment)	8,73,600
2.	The annual cost of augmenting the strength of a Bombay cavalry regiment to four squadrons, or by 75 men of all ranks, would be 42,200 rupees, and for the six regiments the total cost would be (inclusive of one extra squadron commander per regiment)	2,53,200
3.	The annual cost of augmenting the strength of a regiment of Central India Horse to four squadrons, or by 132 men of all ranks per regiment, would be 63,700 rupees, and for the two regiments the total cost would be (inclusive of one extra squadron commander per regiment)	1,27,400
4.	The annual cost of increasing the strength of a Madras cavalry regiment by 102 men, or to a total of 489 of all ranks, would be 50,100 rupees, and for the four regiments the total cost would be	2,00,400
5.	The annual cost of three new cavalry regiments in Bengal of the increased strength proposed would be (inclusive of one extra squadron commander per regiment), at 3,47,800 rupees each	10,43,400
	Total Annual Cost of Augmentation of Native Cavalry in India *Rs.*	24,98,000

Probable Annual Cost of the Augmentation of Native Infantry in Bengal and Bombay, as proposed by the Commander in Chief in India.

	Rs.
1. The annual cost of augmenting the strength of a regiment of Native Infantry, Bengal, by 148 men, or a total of 980 of all ranks, would be 25,000 rupees, and for the 37 regiments the total cost would be	9,25,000
2. The annual cost of augmenting the strength of a regiment of Native Infantry, Punjab Frontier Force, by 148 men, as above, would be 22,500 rupees, and for the 10 regiments (including Guides Corps Infantry) the total cost would be	2,25,000
3. The annual cost of augmenting the strength of a Goorkha and Assam Infantry Regiment by 68 men, or to a total of 980 of all ranks, would be 12,000 rupees, and for the eight regiments the total cost would be	96,000
4. The annual cost of increasing the strength of a regiment of Native Infantry, Bombay, by 148 men, as above, would be 28,500 rupees, and for the 26 regiments the total cost would be	7,41,000
5. The annual cost of nine new regiments of Native Infantry at the proposed increased strength would be:—	
Rs.	
For five Goorkha Battalions at 2,27,700 rupees each - 11,38,500	
For three Sikh Battalions, at 2,41,000 rupees each - 7,23,000	
For one Muzbee Pioneers - 2,30,000	20,91,500
Total Annual Cost of Augmentation of Native Infantry -	40,78,500
In round Numbers - *Rs.*	40,79,000

STATEMENT showing the Approximate Annual Cost of Increase to the British Army in India, as proposed by the Government of India.

	Rs.
1. The annual cost of augmenting the strength of a British cavalry regiment by one squadron (148 men) to a total strength of 602 of all ranks, exclusive of officers, would be 1,49,500 rupees per regiment, and for the nine regiments of cavalry serving in India, the total additional expenditure would be (inclusive of one major, one captain, and four lieutenants for fourth squadron) -	13,45,500
2. The annual cost of augmenting the strength of a battalion of British Infantry by 100 privates, or from 884 to 984 of all ranks (exclusive of officers), would be 44,000 rupees per battalion, and for the 50 battalions serving in India the total expenditure would be	22,00,000
3. The annual cost of three new battalions of British Infantry at the proposed increased strength (984) would be, at 6,33,000 rupees per battalion	18,99,000
4. The annual cost of 11 batteries of Royal Artillery would be:—	
Rs.	
For one battery of horse artillery - 2,02,000	
For two batteries of field artillery, at 1,74,000 rupees each - 3,48,000	
For two batteries of mountain artillery, at 1,53,000 rupees each - 3,06,000	
For six batteries of garrison artillery, at 95,000 rupees each - 5,70,000	14,26,000
Total Annual Cost of Proposal -	68,70,500
In round Numbers - *Rs.*	68,71,000

Probable ANNUAL COST of the Augmentation of Native Cavalry in India, as proposed by the Government of India.

	Rs.
1. The annual cost of augmenting the strength of a Native cavalry regiment, Bengal and Punjab Frontier Force, to four squadrons, or by 75 men of all ranks, would be 41,600 rupees, and for the 17 Bengal and the four Punjab regiments, or in all 21 regiments, the total cost would be (inclusive of one extra squadron commander per regiment) - - - - - -	8,73,600
2. The annual cost of augmenting the strength of a Bombay cavalry regiment to four squadrons, or by 75 men of all ranks, would be 42,200 rupees, and for the six regiments the total cost would be (inclusive of one extra squadron commander per regiment) - - - - - - - - - - - -	2,53,200
3. The annual cost of augmenting the strength of a regiment of Central India Horse to four squadrons, or by 132 men of all ranks per regiment, would be 63,700 rupees, and for the two regiments the total cost would be (inclusive of one extra squadron commander per regiment) - - - - - -	1,27,400
4. The annual cost of increasing the strength of a Madras cavalry regiment by 102 men, or to a total of 489 of all ranks, would be 50,100 rupees, and for the four regiments the total cost would be - - - - - - - - - - - -	2,00,400
5. The annual cost of two new cavalry regiments in Bengal, of the increased strength proposed, would be (inclusive of one extra squadron commander per regiment) at 3,47,800 rupees each -	6,95,600
6. The annual cost of one new cavalry regiment in Bombay, of the increased strength proposed, would be (inclusive of one extra squadron commander) - - - - - - - - - -	3,72,700
Total Annual Cost of Augmentation of Native Cavalry in India -	25,22,900
In round Numbers - - - *Rs.*	25,23,000

Probable ANNUAL COST of the Augmentation of Native Infantry in Bengal, as proposed by the Government of India.

	Rs.	
1. The annual cost of augmenting the strength of a Native Infantry regiment, Bengal, by 80 men, or a total of 912 of all ranks, would be 12,720 rupees, and for the 37 regiments the total cost would be - - - - - - - - - - - -		4,70,640
2. The annual cost of augmenting the strength of a Native Infantry regiment, Punjab Frontier Force, by 80 men, or to total of 912 of all ranks, would be 11,440 rupees, and for the 10 regiments (including Guides Corps Infantry) the total cost would be - - - - - - - - - - - -		1,14,400
3. The annual cost of nine new regiments of Native Infantry at the proposed increase strength would be :—	*Rs.*	
For five new Goorkha battalions at 2,15,700 rupees - - - - - - - - -	10,78,500	
For three new Sikh battalions, at 2,31,000 rupees - - - - - - - - -	6,93,000	
For one new Pioneer battalion - - - -	2,17,500	
		19,89,000
Total Annual Cost of Augmentation of Native Infantry in Bengal - - - - - - - - - - *Rs.*		25,74,040
In round Numbers - - - *Rs.*		25,74,000

NOTE.—The five Goorkha and three Assam regiments have already a strength of 912 men of all ranks.

APPENDIX (H.)—[para. 86 of Letter.]

Estimated Saving by the Changes proposed in the Staff and Commands of the Indian Army.

		Rs.
Estimated annual saving proposed in the Despatch from the Government of India, No. 283, dated 6th November 1881 - -		3,00,000
Add—		
The cost of four Garrison Instructors in Bengal, with reference to paragraph 23 of Secretary of State's Despatch, No. 243, dated 26th July 1883 - - - - - - - - - -		35,376
		3,35,376
Deduct—		
With reference to paragraph 26 of above Despatch from the Secretary of State—		
	Rs.	
(1) Increased cost of office establishments at the head-quarters of the four army corps -	1,00,000	
(2) Pay of the Interpreter to the Commander-in-Chief in India as Lieutenant-Colonel instead of Major - - - - -	2,244	
(3) Allowance for Interpreters to Lieutenant-Generals Commanding Army Corps, 4 × 130 rupees × 12 months - - -	6,240	
(4) Pay of Assistant Judge Advocate General as Lieutenant-Colonel instead of Major -	2,244	
		1,10,728
Net Saving per Annum - - - *Rs.*		2,24,648

APPENDIX (J.)

British Army, India: Present and Proposed Establishment.

Details.	Present Number of Batteries and Regiments.	Strength of one Battery or Regiment.		Increase per Battery or Regiment.	Proposed Number of Batteries and Regiments.	Total Strength of Batteries and Regiments.		Total Increase of Strength.
		Present.	Proposed.			As at Present.	As Proposed.	
Royal Artillery:								
Horse artillery batteries	10	157	157	-	11	1,570	1,727	—
Field artillery batteries	40	157	157	-	42	6,280	6,594	—
Mountain artillery batteries	6	106	106	-	8	636	848	—
Heavy field artillery batteries	4	95	95	-	4	380	380	—
Garrison artillery batteries	17	115	115	-	23	1,955	2,645	—
Total	77	-	-	-	88	10,821	12,194	1,373
Cavalry	9	454	602	148	9	4,086	5,418	1,332
Infantry	50	884	984	100	53	44,200	52,152	7,952
Grand Total	-	-	-	-	-	59,107	69,764	10,657

Native Army, India: Present and Proposed Establishment.

Presidency.	Present Number of Regiments.	Strength of one Regiment.		Increase per Regiment.	Proposed Number of Regiments.	Total Strength of Corps.		Total Increase of Strength.
		Present.	Proposed.			As at Present.	As Proposed.	
Bengal.								
Cavalry:								
Bengal Cavalry	17	550	625	5	19	9,350	11,875	—
Punjab Frontier Force Cavalry	4	550	625	75	4	2,200	2,500	—
Central India Horse	2	493	625	132	2	986	1,250	—
Total	23	-	-	-	25	12,536	15,625	3,089
Infantry:								
Bengal Infantry	37	832	912	80	46	30,784	41,952	—
Punjab Frontier Force (including Guide Corps Infantry).	10	832	912	80	10	8,320	9,120	—
Goorkha and Assam Regiments	8	912	912	-	8	7,296	7,296	—
Total	55	-	-	-	64	46,400	58,368	11,968
Total Bengal	78	-	-	-	89	58,936	73,993	15,057
Madras.								
Cavalry	4	387	489	102	4	1,548	1,956	408
Infantry	32	833	833	-	32	26,656	26,656	—
Total Madras	36	-	-	-	36	28,204	28,612	408
Bombay.								
Cavalry	6	550	625	75	7	3,300	4,375	1,075
Infantry	26	832	832	-	26	21,632	21,632	—
Total Bombay	32	-	-	-	33	24,932	26,007	1,075
Grand Total	146	-	-	-	158	112,072	128,612	16,540

Note.—Exclusive of officers.

— No. 26. —

LETTER from the Under Secretary of State, War Office, to the Under Secretary of State for India.

(120—India—4356.)

Sir, War Office, 11 September, 1885.

IN reply to your letter of yesterday's date, M. 12,502 forwarding the copy of a telegram from the Viceroy, dated 9th instant, in which is specified the deficiency which will exist in each infantry battalion in India when transfers to the Reserve are resumed, I am directed by the Secretary of State for War to acquaint you, for the information of Lord Randolph Churchill, that the deficiencies reported do not in most cases differ largely from those estimated in this Department last July, and make, after excluding Aden, from which station the 1st Battalion South Lancashire Regiment is about to return to the United Kingdom, an aggregate of 6,601 men.

To this number, however, must be added five per cent. calculated on the establishment of each battalion to meet unforeseen casualties during the six months over which the trooping season extends, or 1,960 men, making thus a total of 8,561 men.

So far as can at present be foreseen, all the battalions, with the exception of the seven specified in the letter from this Department (120—India—4037), dated the 30th June last, will be completed to their existing establishment during the course of the present trooping season.

It is computed that the number of men not forthcoming to complete these battalions will be as follows:—

2nd Battalion Royal Lancaster Regiment - - -	70
2nd Battalion Northumberland Fusiliers - - -	110
2nd Battalion Liverpool Regiment - - - -	20
2nd Battalion West Yorkshire Regiment - -	200
2nd Battalion Lancashire Fusiliers - - - -	170
1st Battalion East Lancashire Fusiliers - - -	110
1st Battalion Connaught Rangers - - - -	90
TOTAL - - -	770

I am directed to add, however, that special efforts are being made to obtain qualified men to meet these deficiencies, and there is some reason to hope that even if a sufficient number of such men are not forthcoming to complete them, the deficiencies may in any case be materially reduced.

I have, &c.
(signed) *Ralph Thompson.*

The Under Secretary of State
for India,
India Office, S.W.

— No. 27. —

(No. M. 12,468—85.)

LETTER from the India Office to the War Office.

Sir, India Office, 17 September 1885.

I AM directed by the Secretary of State for India to state, for the information of Mr. Secretary Smith and His Royal Highness the Field Marshal Commanding in Chief, that the Government of India have made proposals for a considerable increase to the British troops on the Indian establishment.

These recommendations may be stated very briefly as an increase of 10,657 men, composed as follows :—

148 men to each regiment of cavalry = 1,332,		
100 men to each battalion of infantry = 5,000,		
3 additional battalions of infantry of the increased strength = 2,952,		
1 additional battery Royal Horse Artillery -	157	1,373,
2 additional field batteries - - - -	314	
2 additional mountain batteries - - -	212	
6 additional garrison batteries - - -	690	

bringing the total Indian establishment up to 70,028.

The subject has not yet come under the actual consideration of the Secretary of State in Council, and it is in view to assisting its consideration that I am to request Lord Randolph Churchill may be informed by what date, assuming the measure to be sanctioned and approved by Her Majesty's Government during the present year, the whole or a portion, and what portion, of the above suggested increase could be furnished and despatched to India.

I am to request that, as the matter has not been brought formally before the Indian Council, this inquiry may be treated as confidential, and that the reply may be given as early as practicable.

I have, &c.
(signed) *Allen Johnson*,
Major-General, Military Secretary.

The Under Secretary of State,
War Office.

— No. 28. —

(No. 20—India—27.)

LETTER from the War Office to the India Office.

Sir, War Office, 23 September 1885.

IN reply to your Letter M. 12,468, of the 17th instant, acquainting me, for the information of the Secretary of State for War, that the Government of India have made certain proposals for the increase of the British troops on the Indian establishment, and asking to be informed by what date the 10,657 men required to make up the contemplated increase could be furnished and despatched, on the supposition that the proposals made shall receive the sanction of Her Majesty's Government during the present year, I have the honour to inform you as follows, for the information of the Secretary of State for India :—

The period required for the preparations to despatch the reinforcements required will differ according to the several arms. In the case of the cavalry, it is hoped that, by using every exertion, the majority, if not all the men required may be recruited and sufficiently trained to allow of their despatch to India by the 1st of April next; but they can in this case be only superficially trained before embarkation.

In regard to the Royal Artillery, one battery Royal Horse Artillery, two batteries Field Artillery, and personnel for two batteries Mountain Artillery can be furnished by the 1st January next. The formation of the six garrison batteries will be a matter of time, the duration of which must be entirely dependent on the state of the recruiting market, which has hitherto been unable to supply the ordinary establishments. It will probably not be excessive to estimate the period at 12 months.

Of the 5,000 infantry men required as an increase to the 50 battalions in India, 2,500 could be supplied by the 1st January next, and the remainder in from nine to twelve months.

The three extra battalions could be made up to the increased establishment and despatched one per month, so as to arrive in India between the 31st January and 31st March 1886.

I am, &c.
(signed) *Ralph Thompson.*

The Under Secretary of State,
India Office.

— No. 29. —

TELEGRAM from Secretary of State to Viceroy, dated 29th September 1885.

YOUR Military Letter, 135, of 1885, under consideration. If proposed increase of 10,657 men is sanctioned, War Office could send one horse battery, two field batteries, and men of two mountain batteries by 1st January next. The six garrison batteries probably not available under 12 months. The three additional infantry battalions could be sent one monthly, to arrive January, February, March next; 2,500 additional men for Indian battalions could be supplied by 1st January; balance in 12 months. The 1,332 cavalry might be ready for dispatch, but only superficially trained, by 1st April next. Assuming approval here, what would you wish done regarding their dispatch?

— No. 30. —

TELEGRAM from Secretary of State to Viceroy, dated 2nd October 1885.

IN continuation, mine 29th September 1885, army increase; most desirable reply should be sent as early as possible.

— No. 31. —

TELEGRAM from Viceroy, dated 5th October 1885.

WE are prepared to receive troops as proposed, except cavalry, which should be trained in England and sent by first troopship in 1886-87.

— No. 32. —

TELEGRAM from Secretary of State to Viceroy, dated 14th October 1885.

YOUR Military Letter, 135, of 1885, increase to establishment British troops. All recommendations approved. One battery horse, two batteries field, two batteries mountain artillery, three battalions infantry of revised strength, and 2,500 infantry drafts for augmentation leave this trooping season; remainder during season 1886-87.

Programme dates of sailing follows.

Proposed increase to Native Army, temporary and permanent sanctioned, but I urge corresponding increase to Guides Cavalry.

Regulations for employ and payment of men of first and second reserve all approved, but men called out for training should not receive both reserve and full pay while out. Measures for forming regiments of three linked battalions, including arrangements in paragraph 36 for British officers, approved.

Measures for improving position of native soldiers approved, except improved hutting allowances, which I wish to see first in detail.

Despatch follows regarding mode and conditions of transfer of Punjab Frontier Force, and dealing with the other points in paragraphs headed reductions and reorganisation.

I suggest orders for linking battalions, reserves, and improvements in native soldiers' position should be issued simultaneously.

— No. 33. —

(M. 12,468—85.)

LETTER from the India Office to the War Office.

Sir, India Office, 15 October 1885.

I AM directed by the Secretary of State for India in Council to forward, for the information and early consideration of the Secretary of State for War, the accompanying copy of a letter* from the Government of India, conveying their proposals for placing Her Majesty's forces in India, both British and Native, on a footing adapted to the new conditions which they may be called upon to meet. These conditions are so well known to Her Majesty's Government that it appears to Lord Randolph Churchill superfluous to enter on any explanations regarding them.

* No. 135 of 1885.

I am to observe that the increase the Government of India propose for the Native Army must be, to a great extent, contingent on that proposed for the British force, as it is essential that the existing proportion of British to Native troops shall not be lowered.

His Lordship in Council, I am to state, is prepared to sanction all the measures recommended by the Government of India for the augmentation of the British establishment, and he trusts that they will be concurred in by Her Majesty's Government, and that Mr. Secretary Smith will be able to take the needful steps for placing the British establishment in India on the footing now recommended, and maintaining it at that strength for the future.

These measures contemplate the addition to the permanent Indian establishment of 11 batteries of artillery, with a total of 55 officers and 1,373 men of all ranks; of the addition of a fourth squadron to each of the nine regiments of British cavalry now in India, or a total of 54 officers and 1,332 men of all ranks; the augmentation of each battalion of British infantry by 100 rank and file, or an addition of 5,000 men for the 50 battalions on the establishment; and an addition to that establishment of three battalions of the revised strength, viz., 984 of all ranks, excluding officers. The total augmentation of the British establishment in all three arms thus being 196 officers and 10,657 of all other ranks.

The Secretary of State of War will observe that the permanent increase proposed by the Government of India falls short of that recommended by the Commander in Chief, but the difference between them, as pointed out by the Government in paragraph 11 of their letter, is rather apparent than real, and is only due to the apprehension entertained by Sir D. Stewart that the deficiencies in drafts to complete the establishment which have been experienced during the past few years will continue in the future. Lord Randolph Churchill, in view of the past, cannot too strongly urge on the Secretary of State for War the paramount necessity of taking adequate and unremitting measures to ensure that the Indian establishment of British troops shall always be kept up to its full strength, whatever that may be. On any other view it would, in his opinion, be of no more use to fix the establishment at the higher than the lower rate, and it is in the conviction that no Government which may be in power at home will henceforth allow the British force in India to fall below the establishment deemed essential for its security that his Lordship adopts that now proposed by the Government of India, in lieu of the higher one advocated by Sir Donald Stewart.

It was in anticipation of the consideration of these measures by his Lordship in Council that the inquiry was made in my letter, No. 12,468, dated 17th September 1885, as to whether, in the demand being assumed, the additional troops and drafts could be supplied at all, and, if so, by what date they would be ready for dispatch to India. Sir R. Thompson's reply, which I am directed to acknowledge, was communicated by telegraph to the Government of India for their opinion as to when, if sanctioned, the troops should be dispatched. They state that they are prepared to receive all the troops, as proposed, except the cavalry drafts, which should be trained in England and sent by the first troop-

ship

ship in 1886-87. On learning, therefore, that the arrangement proposed in your letter of the 23rd September 1885 can still be given effect to, Lord Randolph Churchill will cause the necessary steps to be taken, in communication with the Admiralty, for the provision of transport for three field batteries, two mountain batteries, three infantry battalions, and 2,500 infantry drafts, to embark on the dates indicated in that letter.

Assuming that the proposals now put forward meet with the concurrence of the Secretary of State for War, I am to request information as to whether they will necessitate any increase to the strength of the depôts now maintained, and, if so, to what extent.

Contingent on the proposed increase to the British forces being carried into effect, Lord Randolph Churchill proposes to accord his sanction to the measures for the augmentation to the Native Army, and for the formation of a reserve as recommended by the Government of India. His Lordship in Council is prepared also to sanction the several measures proposed for the improvement of the position of the native soldier, which will, his Lordship trusts, greatly facilitate the future recruiting of the Army.

With respect to the proposals again put forward by the Government of India for the abolition of the presidential system, and the reorganisation of the three armies in four corps under the direct and sole control of the Government, no steps can, under existing circumstances, be taken, but Lord Randolph Churchill approves of the transfer of the Punjab Frontier Force to the orders of the Commander in Chief in India, on the condition that it remains a purely local force, though liable, of course, for service in any quarter. His Lordship, I am to add, is not at present in a position to decide on the recommendations of the Government for the reduction in the number of general officers' commands.

I am to request that the Secretary of State in Council may be favoured with as early a reply as the Secretary of State for War may be able to afford.

I have, &c.

(signed) *Allen Johnson*, Major General,
Military Secretary.

The Under Secretary of State
for War.

— No. 34. —

(M. 6820.)

LETTER from the War Office to the India Office.

Sir, 22 October 1885.

IN reply to your letter of the 15th instant, forwarding, for the consideration of the Secretary of State for War, the copy of a letter from the Government of India regarding their proposals for placing Her Majesty's forces in India upon an improved footing, I am directed by Mr. Secretary Smith to inform you, for the information of the Secretary of State for India, that he concurs in the measures recommended by the Government of India for the augmentation of the British establishment, and that the necessary steps are being taken to give effect to them.

In my letter, 20-India-27, of the 23rd ultimo, it was stated what portions of the troops required to complete the proposed new establishments could be dispatched during the present season, and the dates by which they could be prepared for embarkation.

I have now to inform you that the one horse artillery battery, two field batteries, two mountain batteries, three battalions, and about 2,500 infantry drafts will be forthcoming by the dates named, and, as soon as the arrangements for transport are notified by you, the details will be furnished in the ordinary manner.

With regard to the suggestion by the Government of India, that the dispatch of cavalry drafts for the formation of a fourth squadron to each of the cavalry regiments in India should be deferred till next trooping season, I am directed to acquaint you that the means do not exist at the cavalry depôt, either for accom-

modating or training, at one time, so large a number of cavalry recruits, and it is consequently most desirable that about 500 of them should be dispatched to India towards the end of the present trooping season.

When the new establishments have been reached every effort will be made to maintain them complete, but I am directed by the Secretary of State for War to point out that, in order to meet the demands now put forward, a great strain will necessarily be thrown upon the Home Army, from the ranks of which the men preparing for next year's ordinary drafts will have to be taken, and no small difficulty is to be anticipated in replacing them and furnishing the drafts in 1886-87.

This can only be done by now recruiting largely in excess of the existing home establishments, while the extent of the permanent increase which will be required in these to admit of the larger drafts that will be wanted in future must be a matter for subsequent consideration. The additional expense entailed by both these causes will, in any case, necessitate considerably increased charges, which must fall upon Indian funds.

I have, &c.
(signed) *H. G. Deedes.*

The Under Secretary of State,
India Office.

— No. 35. —

EXTRACT from a Despatch to the Secretary of State for India, No. 179, dated 26th October 1885.

To Adjutant General in India, No. 597-B., dated 13th August 1885.
To Government of Madras, No. 598-B., dated 13th August 1885, and enclosure.
To Government of Bombay, No. 599-B., dated 13th August 1885, and enclosure.
To Government of Punjab, No. 600-B., dated 13th August 1885, and enclosure.
To Foreign Department, No. 601-B., dated 13th August 1885, and enclosure.
From Adjutant General in India, No. 2722-B., dated 21st August 1885.
From Adjutant General in India, No. 2838-B., dated 28th August 1885.
Special India Army Circular, dated 4th September 1885.
To Adjutant General in India, No. 728-B., dated 5th September 1885.
From Adjutant General in India, No. 2902-B., dated 4th September 1885, and enclosure.
To Adjutant General in India, No. 756-B., dated 10th September 1885.
From Adjutant General in India, No. 3038-B., dated 11th September 1885.
Special India Army Circular, dated 15th September 1885.
To Adjutant General in India, No. 781-B., dated 16th September 1885.
To Foreign Department, No. 782-B., dated 16th September 1885.
To Government of Bombay, No. 783-B., dated 16th September 1885.
To Government of Punjab, No. 784-B., dated 16th September 1885.
From Foreign Department, No. 3170-I., dated 15th September 1885.
From Government of Punjab, No. 526-S-C., dated 18th September 1885, and enclosure.
To Government of Punjab, No. 832-B., dated 25th September 1885.
To Foreign Department and *others*, No. 895-B., dated 9th October 1885.
From Government of Bombay, No. 5336, dated 10th October 1885.

Para. 13. Correspondence regarding the revision of establishments of native cavalry regiments in India and formation of three additional regiments. [Your Lordship's telegram, dated 4th August 1885.]

Enclosures in No. 35.

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Adjutant General in India—(No. 597-B.—"Organisation, Native Army"; dated Simla, 13th August 1885).

I AM directed to forward herewith a copy of a Despatch, No. 63, of the 4th of May, to the Secretary of State proposing an augmentation of the Native Army.

2. The

2. The proposals therein contained as regards the infantry have been superseded by other and later proposals, but the proposals as regards the cavalry have now been sanctioned by the Secretary of State.

3. Enclosed is a draft of the Army Circular giving effect to this augmentation. I am to ask that, under the Commander in Chief's orders, such additions may be made to it as may appear necessary, and that it may be returned with any recommendations his Excellency may desire to make as regards the manner in which the new squadrons may be formed, the classes from which they are to be recruited, and the castes of which they are to be composed.

4. I am also to ask that the Commander in Chief will please to consider whether this opportunity may not be conveniently taken to confer commissions of Ressaldar and Ressaidar on a few native gentlemen of rank who may be desirous of accepting such positions, and whose services would be useful in procuring recruits.

5. With regard to the new regiments to be formed, the Government of India desire to receive the opinion of his Excellency as to the manner in which, and the classes from which, they should be raised, and especially whether, in view of the probability of the Indian Army being in future employed to a considerable extent beyond the frontier, and the disinclination of Indians to prolonged service away from India, it would not be expedient that at least one of the regiments should be raised from tribes beyond the frontier, and employed, for the most part, locally.

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Secretary to the Government of Madras, Military Department, (No. 598-B.—"Organisation, Native Army"; dated Simla, 13th August 1885).

THE Government of India have lately submitted proposals to the Secretary of State for India for strengthening the establishment of native cavalry regiments, which proposals have now been sanctioned by Her Majesty's Government.

2. The proposed increase to the Madras Cavalry consists in the addition to each of the four regiments of six naiks and 96 privates, when the present and new establishments will be as shown in the table below.

3. I am to ask that the Madras Government will be pleased to issue the necessary orders for carrying out this augmentation.

ESTABLISHMENT of a Regiment of Madras Cavalry.

	Present.	Now Sanctioned.
British Officers:		
Commandant	1	1
Squadron Commanders	3	3
Squadron Officers	4	4
Medical Officer	1	1
Total	9	9
Natives:		
Subadars	6	6
Jemadars	6	6
Havildar Major	1	1
Havildars	30	30
Naiks	24	30
Trumpet Major	1	1
Trumpeters	6	6
Farrier Major	1	1
Farrier Havildars	6	6
Shoeing Smiths and pupils	6	6
Troopers	300	396
TOTAL	387	489

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Secretary to the Government of Bombay, Military Department,—(No. 599-B.—"Organisation, Native Army"; dated Simla, 13th August 1885).

THE Government of India have lately submitted proposals to the Secretary of State for India for augmenting the strength of the Native cavalry. The sanction of Her Majesty's Government to these proposals has now been received.

2. The augmentation comprises the addition of a fourth squadron to each of the existing six regiments of Bombay cavalry, thus bringing up the regiment to a strength of 625 of all ranks, the present and new establishments being as shown in the annexed table.

3. I am to ask that the Government of Bombay will be pleased to issue the necessary orders for carrying out this augmentation.

4. Her Majesty's Government have also sanctioned the proposal made by the Governor General in Council for adding an additional regiment to the Bombay establishment to take the place of the 3rd Sind Horse, to be raised locally, and to consist as far as possible of men from tribes on the Biluchistan frontier. I am to ask that an early opinion may be furnished to the Government of India whether a regiment can be so raised, with any suggestions that may occur to the Bombay Government for carrying such a measure out.

5. It would be obviously desirable that officers of special qualifications should be selected for the duty. The regiment should be raised, as far as possible through tribal agency, commissions being given to chiefs who could bring recruits, and who are in other respects eligible and likely to prove useful as native officers in cavalry regiments.

6. I am to suggest that this oppartunity may be usefully taken to find places in some one or other of the cavalry regiments for any cavalry officers who, from no fault of their own, are not at present borne on the cadres of any regiments. As the Government of Bombay are aware, under the system now in force officers on appointment to the staff are seconded in their regiments, so that every officer, whether employed on the staff or otherwise, will have a place in some regiment. But it is believed that some officers who were formerly, or are now on the staff, and so under the old system vacated their regimental appointments, have no longer places on the cadres of regiments, and therefore are, or will find themselves unprovided for on the termination of the tour of their staff employment. It would be very desirable, in the opinion of the Governor General in Council, to take advantage of this augmentation to assign such officers, if there are any in the Bombay Army, definite places in some regiments.

ESTABLISHMENT of a Regiment of Bombay Cavalry.

	Present.	Now Sanctioned.
British Officers:		
Commandant	1	1
Squadron Commanders	3	4
Squadron Officers	4	4
Medical Officers	1	1
Total	9	10
Natives:		
Ressaldars	3	4
Ressaidars	3	4
Ressaidar Woordie Major	1	1
Jemadars	6	8
Kote Duffadar Major	1	1
Farrier Major	1	1
Kote Duffadars	6	8
Duffadars	30	32
Trumpeters	6	8
Naiks	30	40
Sowars	463	518
Total	550	625

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Military Secretary to the Government of the Punjab (No. 600-B. —"Organisation, Native Army;" dated Simla, 13th August 1885).

HER Majesty's Government having sanctioned the addition of a fourth squadron to each of the four cavalry regiments of the Punjab Frontier Force, I am desired to forward, for the information of the Lieutenant Governor, a tabular statement showing the existing establishment of a cavalry regiment of the force, and the revised establishment now sanctioned.

2. I am to ask that, under the Lieutenant Governor's orders, the Government of India may be informed how it is proposed the increase now sanctioned is to be carried out, and the classes of which the new squadron should be composed.

ESTABLISHMENT of a Regiment of Bengal and Punjab Cavalry.

	Present.	Now Sanctioned.
British Officers:		
Commandant	1	1
Squadron Commanders	3	4
Squadron Officers	4	4
Medical Officers	1	1
Total	9	10
Natives:		
Ressaldars	3	4
Ressaidars	3	4
Ressaidar Woordie Major	1	1
Jemadars	6	8
Kote Duffadars	6	8
Duffadars	48	56
Trumpeters	6	8
Privates	477	536
Total	550	625

Office Memorandum from Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Secretary to the Government of India, Foreign Department (No. 601-B.—"Organisation, Native Army"; dated Simla, 13th August 1885).

THE undersigned is directed to forward a schedule showing the present establishment of the Central India Horse, and the establishment which has lately been sanctioned by the Secretary of State as part of the augmentation of the Native cavalry proposed by the Government of India.

2. This augmentation for the Central India Horse may now be carried out. But this Department requests to be informed of the classes of men it is proposed that the augmentation should consist of.

ESTABLISHMENT of each of the Two Regiments of Central India Horse.

	Present.	Now Sanctioned.
British Officers:		
Squadron Commanders	3	4
Squadron Officers	3	3
Medical Officer	1	1
Total	7	8
Natives:		
Ressaldars	3	4
Ressaidars	3	4
Woordie Major	1	1
Jemadars	6	8
Kote Duffadars	-	8
Duffadars	54	56
Trumpeters	6	8
Sowars	420	536
Total	493	725

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the the Secretary to the Government of India, Military Department.—(No. 2722-B. "Native Army, Organization"; dated Simla, 21st August 1885)

In returning the enclosed draft India Army circulars, giving effect to the augmentation of the Native cavalry regiments in India received with your No. 597-B. (Organisation, Native Army), dated 13th August 1885, I am directed to state that the Commander-in-Chief suggests that the following be added thereto:

"The above revised establishment of each regiment will be organised in four squadrons consisting of eight troops."

2. The remaining portion of your letter will be replied to hereto.

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department.—(No. 2838-B., "Native Army, Organization"; dated Simla, 28th August 1885).

IN continuation of this Office No. 2722-B., dated 21st August 1885, I am now directed to convey the Commander in Chief's recommendation on certain points regarding the two new regiments of Bengal cavalry about to be raised.

2. His Excellency recommends that the composition of the two regiments (which will be styled the 16th and 17th Bengal Cavalry) should be as follows:

16th Bengal Cavalry.

4 troops	- Sikhs.
2 „	- Dogras.
2 „	- Jats of Hindustan.

17th Bengal Cavalry.

4 troops	- Punjabi Mahomedans.
2 „	- Mahomedans, trans-Indus British subjects.
2 „	- Mahomedans, independent tribes, such as Biluch, Afghans, Farsiwans.

3. After

3. After careful consideration of the point raised in the fifth paragraph of your letter, No. 597-B., of 13th August 1885, his Excellency cannot recommend that one of the regiments should consist entirely of tribes beyond the frontier. It would be very difficult, if not impossible, to get the requisite number of men of this class with money to pay their chunda; and such a regiment could only be formed on an entirely different footing from the other regiments of Bengal Cavalry. The Commander-in-Chief is also unable to recommend that either of the new regiments should be local. In his Excellency's judgment past experience has amply proved that local regiments would soon become inferior in discipline and military efficiency to general service corps.

4. The following is the dress, armament, &c., proposed for the regiments:

Arms - - - - - - -	Sword and carbine.
Dress - - - - - - -	Dark blue, lace gold, as in the 12th Bengal Cavalry. The selection of facings might be left to the commanding officers.
Equipment and saddlery - - -	Mackenzie pattern.

5. In order to form the nucleus of the new regiments, it will be necessary to call for a certain number of volunteers from the existing regiments of Bengal Cavalry. This will be arranged for under his Excellency's orders.

6. With reference to paragraph 4 of your letter, No. 597-B., of 13th August 1885, I am desired to state that a list of candidates for direct commissions is kept in this office; but as not much is really known about these men, his Excellency thinks that it will be a better plan to offer a certain number of commissions, say one-third in each regiment, to native gentlemen bringing recruits on somewhat the following scale:

To native gentlemen bringing 20 men of the classes required, with horses fit for service, and 50 rupees towards defraying cost of equipment (or 20 men with 250 rupees each).	A commission as jemadar without probation.
To those bringing 40 men and horses - - -	A ressaidar's commission.
To those bringing 50 men and horses - - -	A ressaldar's commission.

It is suggested that a Governor General's Order should issue notifying this decision; or, if the Government desire it, it can be notified in General Order by his Excellency the Commander-in-Chief.

7. The Commander-in-Chief believes that the commanding officers of the 16th and 17th Bengal Cavalry will require considerable pecuniary and other assistance from Government in the form of loans for purchase of remounts, and making up saddlery and equipment at the Government factory, or to be allowed to purchase certain material, such as numdah and cloth, from Government stores, if they can conveniently be spared. On these points further communications will be made to you if necessary.

8. A separate letter will shortly be forwarded to you regarding the caste constitution of the new troops of the existing regiments of Bengal Cavalry.

INDIA ARMY CIRCULARS, 1885.—[Clause 130.]

Organisation.—Native Army.

Simla, 4th September 1885.

Formation of Three Additional Regiments of Cavalry.

WITH the sanction of Her Majesty's Government, the Governor General in Council directs the immediate formation of three additional regiments of Native Cavalry, of which two will be raised in the Bengal Presidency and one in Bombay.

2. The two regiments to be raised in Bengal will be designated the 16th and 17th Regiments of Bengal Cavalry, with the following establishment :—

British—	
Commandant	1
Squadron commanders	4
Squadron officers	4
Medical officer	1
Total	10
Native—	
Ressaldars	4
Ressaidars	4
Ressaidar-Woordie Major	1
Jemadars	8
Kote Duffadars	8
Duffadars (including farrier-major and salutri)	56
Trumpeters	8
Sowars (including one assistant salutri, eight farriers, and eight camel sowars)	536
Total	625

3. To form the nucleus of these two regiments, volunteers will be called for, under the orders of his Excellency the Commander-in-Chief, from existing regiments of Bengal Cavalry.

One-third of the commissions in each regiment will be conferred on native gentlemen who may come forward with recruits, according to the following scale :—

To a native gentleman bringing 20 men of the classes required, with horses fit for service, and 50 rupees towards defraying cost of equipment, or 20 men with 250 rupees each	A commission as jemadar without probation.
To a native gentleman bringing 40 men and horses	A ressaidar's commission.
To a native gentleman bringing 50 men and horses	A ressaldar's commission.

4. The armament of these regiments will be sword and carbine, with revolvers for those ranks which are now so armed in the Bengal Cavalry.

5. The regiment to be raised in the Bombay Presidency will be formed under the orders of the Government of Bombay.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 728-B.—" Organisation—Native Army ;" dated Simla, 5th September 1885).

I AM directed to acknowledge the receipt of your letter, No. 2838-B., dated the 28th ultimo, conveying the recommendation of the Commander in Chief on certain points connected with the formation of additional regiments of Native Cavalry.

2. In reply, I am to say that the Government of India sanction the adoption of his Excellency's proposals. I am to forward a copy of a special army circular, dated the 4th instant, authorising the formation of the additional regiments, and laying down the establishment sanctioned for them, &c., and to request that his Excellency may be moved to issue all necessary subsidiary orders.

From Major-General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 2902-B.—" Native Army--Organisation ;" dated Simla, 4th September 1885).

IN continuation of this office letter, No. 2838-B., dated the 28th August 1885, I am directed to state that, after consulting commanding officers as to their wishes, the Commander in Chief recommends that the caste constitution of the two extra troops sanctioned for regiments of Bengal Cavalry should be as given in the enclosed statement.

STATEMENT showing the Caste Composition of the Two Extra Troops sanctioned for Bengal Cavalry Regiments.

1st Bengal Cavalry -	2 troops Hindustani Mahomedans.
2nd „ „ - -	1 troop Sikhs, 1 troop Rajputs.
3rd „ „ - -	1 troop Sikhs, 1 troop Jats.
4th „ „ - -	1 troop Sikhs, 1 troop Hindustani Mahomedans.
5th „ „ - -	2 troops Jats.
6th „ „ - -	1 troop Jats, 1 troop Sikhs.
7th „ „ - -	1 troop Jats, 1 troop Dogras.
	The enlistment of Dogras has been discontinued in this regiment since the issue of General Order, No. 9, of 1883; but the officer commanding reports that he still has 56 men of this class, and would experience no difficulty in completing the troop.
8th „ „ - -	1 troop Hindustani Mahomedans, 1 troop Jats.
9th „ „ - -	1 troop Sikhs, 1 troop Punjabi Mahomedans.
10th Bengal Lancers -	1 troop Sikhs, 1 troop Punjabi Mahomedans.
11th „ „ - -	1 troop Sikhs, 1 troop Dogras.
12th Bengal Cavalry -	1 troop Sikhs, 1 troop Punjabi Mahomedans.
13th Bengal Lancers -	1 troop Sikhs, 1 troop Punjabi Mahomedans.
14th „ „ - -	2 troops Jats.
15th Bengal Cavalry -	1 troop Punjabi Mahomedans, 1 troop trans-Indus and border tribes.
18th „ „ - -	1 troop Punjabi Mahomedans, 1 troop Sikhs.
19th Bengal Lancers -	1 troop Punjabi Mahomedans, 1 troop Sikhs.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 756-B.—"Organisation—Native Army;" dated Simla, 10th September 1885).

I AM directed to acknowledge the receipt of your letter No. 2902-B., dated the 4th instant, and in reply to say, for the information of the Commander-in-Chief, that the caste constitution of the two additional troops sanctioned for regiments of Bengal Cavalry, as detailed in the statement enclosed therein, is approved by the Government of India.

2. An India Army Circular notifying the revised establishment of Native cavalry regiments in India will be issued very shortly.

From Colonel *H. Collett*, Deputy Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 3038-B.—"Native Army—Organisation;" dated Simla, 11th September 1885).

I AM directed by the Commander-in-Chief to recommend that the offer of a commission without probation to native gentlemen bringing a certain number of recruits for the two new regiments of Bengal Cavalry may be extended to those who may bring men to complete the revised establishments of the old regiments to the extent of two commissions in each regiment.

INDIA ARMY CIRCULARS,—1885.—[Clause 131.]

Organisation.—Native Army.

Simla, 15th September 1885.

Revised Establishments of Native Cavalry Regiments in India.

UNDER authority from Her Majesty's Government, the establishments of Native cavalry regiments in India are revised as follows:—

Establishment of a Regiment of Bengal and Punjab Cavalry.

(Organised in four squadrons.)

British—	
Commandant	1
Squadron Commanders	4
Squadron Officers	4
Medical Officer	1
TOTAL	10
Native—	
Ressaldars	4
Ressaidars	4
Ressaidar Woordie-Major	1
Jemadars	8
Kote Duffadars	8
Duffadars (including farrier-major and salutri)	56
Trumpeters	8
Sowars (including one assistant salutri, eight farriers, and eight camel sowars)	536
TOTAL	625

Establishment of each of the two Regiments of Central India Horse.

(Organised in four squadrons.)

British—	
Squadron Commanders	4
Squadron Officers	3
Medical Officer	1
TOTAL	8
Native—	
Ressaldars	4
Ressaidars	4
Ressaidar Woordie-Major	1
Jemadars	8
Kote Duffadars	8
Duffadars	56
Trumpeters	8
Sowars (including 16 camel sowars)	536
TOTAL	625

Establishment of a Regiment of Madras Cavalry.

(Organised in three squadrons.)

British—	
Commandant	1
Squadron Commanders	3
Squadron Officers	4
Medical Officer	1
TOTAL	9
Native—	
Subadars	3
Jemadars	6
Havildar-Major	1
Havildars	30
Naiks	30
Trumpet-Major	1
Trumpeters	6
Farrier-Major	1
Farrier-Havildar	6
Shoeing-smiths	3
Veterinary pupils	3
Privates	396
TOTAL	489

Establishment of a Regiment of Bombay Cavalry.

(Organised in four squadrons.)

British—	
Commandant	1
Squadron Commanders	4
Squadron Officers	4
Medical Officer	1
TOTAL	10
Native—	
Ressaldar	4
Ressaidar	4
Ressaidar Woordie-Major	1
Jemadars	8
Kote Duffadar-Major	1
Farrier-Major	1
Kote Duffadars	8
Duffadars	32
Trumpeters	8
Naiks	40
Sowars (including eight camel-sowars)	518
TOTAL	625

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 781-B.—"Organisation—Native Army;" dated Simla, 16th September 1885).

I AM directed to acknowledge the receipt of your letter, No. 3038-B., dated the 11th instant, and in reply to say, for the information of the Commander-in-Chief, that the Government of India sanction the offer of commissions without probation to the extent of two per regiment on the terms set forth in paragraph 3 of the Special India Army Circular, dated the 4th instant, to native gentlemen who may bring men to complete the revised establishments of regiments of Bengal Cavalry.

Office Memorandum from Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Secretary to the Government of India, Foreign Department (No. 782-B.—"Organisation—Native Army;" dated Simla, 16th September 1885).

THE undersigned is directed to forward the correspondence noted in the margin and to request that, should the course sanctioned in regard to the grant of direct commissions to native gentlemen bringing men to complete the revised establishments of Bengal Cavalry regiments be considered feasible or desirable in the Central India Horse, the needful instructions may be issued in continuation of the India Army Circular.

From Adjutant General in India, No. 3038-B., dated 11th September 1885.
Military Department letter to the Adjutant General in India, No. 781-B., dated 16th September 1885.
Special India Army Circular, dated 15th September 1885.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Secretary to the Government of Bombay, Military Department (No. 783 B.—"Organisation, Native Army;" dated Simla, 16th September 1885).

I AM directed to forward, for information of the Governor in Council, the correspondence noted in the margin, and to request that, should the course sanctioned in regard to the grant of direct commissions to native gentlemen bringing men to complete the revised establishments of Bengal Cavalry regiments be considered feasible or desirable in the Bombay Cavalry, the needful instructions may, under the orders of his Excellency in Council, be issued in continuation of the India Army Circular.

From the Adjutant General in India, No. 3038-B., dated 11th September 1885.
Military Department letter to the Adjutant General in India, No. 781-B., dated 16th September 1885.
Special India Army Circular, dated 15th September 1885.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Military Secretary to the Government of the Punjab (No. 784-B.—"Organisation—Native Army;" dated Simla, 16th September 1885).

I AM directed to forward, for the information of the Lieutenant-Governor, the correspondence noted in the margin, and to request that, should the course sanctioned in regard to the grant of direct commissions to native gentlemen bringing men to complete the revised establishments of Bengal Cavalry regiments be considered feasible or desirable in the cavalry of the Punjab Frontier Force, the needful instructions may, under Sir Charles Aitchison's orders, be issued in continuation of the India Army Circular.

From the Adjutant General in India, No. 3038-B. dated 11th September 1885.
Military Department letter to the Adjutant General in India, No. 781-B., dated 16th September 1885.
Special India Army Circular, dated 15th September 1885.

From Sir *Lepel Griffin*, K.C.S.I., Agent to the Governor General for Central India, to the Secretary to the Government of India, Foreign Department (No. 46-M—371; dated Indore Residency, 5th September 1885).

I HAVE the honour to acknowledge the receipt of your letter, No. 2828-I., dated 20th August 1885, on the subject of the increased establishment for the Central India Horse, and in reply to forward copy of a letter from the Commandant giving the classes of men from which he proposes to draw the additional strength required, and also suggestions regarding the enlistment of sowars.

No. 300, dated 1st September 1885.

From Colonel *C. Martin*, C.B., Commandant, Central India Horse, to the 2nd Assistant Agent to the Governor General for Central India (No. 300; dated Agar, 1st September 1885).

I HAVE the honour to acknowledge the receipt of your Memorandum, No. 2994, dated 27th August 1885, giving cover to copy of letter, No. 2828-I., dated 20th August 1885, from the Under-Secretary, Foreign Department, to the Agent to Governor General for Central India, authorising an augmentation to each regiment, Central India Horse, according to a schedule attached.

2. I propose

2. I propose that the augmentation should consist of a troop of Sikhs and a troop of Mahomedans (Ranghurs and Gukhas from the Jhelum District) in each regiment.

Each regiment will then consist of—

Sikhs	3 troops.
Jats	1 troop.
Rajputs	1 troop.
Ranghurs	2 troops.
Gukhas and Pathans	1 troop.
Total	8 troops.

A few Pathans are very useful, but I do not propose to increase the number largely.

3. I do not wish to solicit the Government of India to advance money at a time when it is urgently required for other purposes, nor is it necessary to do so. But money will be required, for it is quite a mistake to suppose that good recruits will come forward with money of their own. If they do so, as a rule it is with money borrowed from relatives and others at 24 and 36 per cent. A much better class of men will be procured if I am able to advance them the money for horses and equipments. The regimental funds are not available for the purpose, and the sum required is 40,000 rupees for each regiment. It would not exceed this sum, and I beg to be allowed to borrow the money, which I can do without difficulty, at 7½ per cent. per annum. The interest would be added to the cost of supplying the recruit with horse and equipments, and the whole would be recovered by monthly instalments. Endeavours will, of course, be made to get recruits who can bring their own horses. There will be no difficulty in carrying out the above arrangement if sanction is accorded.

I beg permission to order the required number of swords from England, as we have heretofore done.

No. 3170-I.

COPY of the above forwarded to the Military Department for consideration, with reference to that Department's communication, No. 601-B., dated the 13th August 1885.

(signed) *G. S. Forbes,*
Junior Under-Secretary to the
Simla, the 15th September 1885. Government of India, Foreign Department.

From Major *J. Davidson,* Secretary to the Government of Punjab, Military Department, to the Secretary to the Government of India, Military Department (No. 526—S—C.; dated Simla, 18th September 1885).

I AM desired to forward, for consideration, copy of a letter from the Brigadier General Commanding Punjab Frontier Force on the subject of the constitution of the two new troops in each regiment of Punjab Cavalry.

2. I am to state that the Lieutenant Governor concurs in the constitution recommended, and strongly supports the application for an advance of 15,000 rupees to each regiment made in paragraph 4.

3. The subject of promotions consequent on the augmentation of these regiments will be followed up very shortly.

From Brigadier-General *T. G. Kennedy,* C.B., Commanding Punjab Frontier Force, to the Military Secretary to the Government of the Punjab (No. 435-B.,; dated Abbottabad, 11th September 1885).

IN reply to your endorsement,* No. 1333, dated 19th ultimo, calling for proposals regarding the carrying out of the augmentation sanctioned for the four cavalry regiments of the Punjab Frontier Force, I have the honour to report that a fourth squadron will, on due sanction thereto, be added to each of the four regiments of Punjab Cavalry by the enlistment of 75 recruits, and by the necessary transfers from the existing squadrons to be reduced in strength to the new one to be raised.

* Government of India, Military Department, Letter No. 600-B., dated 13th ultimo to your address.

2. The classes required by the various commandants are—

1*st Punjab Cavalry*—One troop each of Sikhs and of Dogras.

2*nd Punjab Cavalry*—One troop of Sikhs, and one troop, half of Pathans and half of Punjabi Mahomedans.

3*rd Punjab Cavalry*, 5*th Punjab Cavalry*—One troop each of Punjabi Mahomedans and of Sikhs.

3. The transfer will temporarily disturb the "class troop" organisation recently sanctioned, and now nearly completed in all our regiments; but eventually they will be of the following constitution, if the present wishes of commandants are sanctioned; and I recommend that they be so:—

Regiments.	Troops.								
	Punjabi Mahomedans.	Trans-Indus within border Pathans.	Hindustanis.		Sikhs.	Dogras and Punjabi Hindus.	Religious Element.		Total Troops.
			Mahomedans.	Hindus.			Mahomedans.	Hindus.	
1st Punjab Cavalry - -	–	2	2	–	2	2	4	4	8
2nd „ „ - -	1½	1	1	1	3	–	4	4	8
3rd „ „ - -	1	1	2	–	3	1	4	4	8
5th „ „ - -	1	1	1	1	3	1	3	5	8
Total - - -	3½	5½	6	2	11	4	15	17	32

4. I strongly recommend a grant-in-aid (to equip and mount without delay the 75 new enlistments), of 15,000 rupees as an advance to each regiment, to be repaid by monthly instalments of 375 rupees (or 5 rupees a man per mensem), and to be fully adjusted in 3½ years, and I earnestly ask that sanction for this advance may accompany the order for the new squadron, and that such may be as promptly given as possible; otherwise the Punjab Cavalry will be at a great disadvantage in the horse market compared with the Bengal Cavalry.

From Major *E. Hay*, for Secretary to the Government of India, Military Department, to the Military Secretary to the Government of the Punjab (No. 832–B.—"Organization—Native Army;" dated Simla, 25th September 1885).

I am directed to acknowledge the receipt of your letter, No. 526–S–C., dated the 18th instant, and in reply to say, for the information of the Lieutenant-Governor, that the proposed composition of the two new troops to be added to cavalry regiments of the Punjab Frontier Force is approved by the Government of India.

2. The question of the advances asked for will be made the subject of a separate communication.

Office Memorandum from Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Secretary to the Government of India, Foreign Department (No. 895-B.—"Organisation;" dated Simla, 9th October 1885).

The undersigned is directed to acknowledge the receipt of Foreign Department Endorsement No. 3170–I., dated the 15th ultimo, forwarding, for the consideration of the Military Department, correspondence on various points connected with the organisation of the extra squadron added to each regiment of the Central India Horse.

2. In

2. In reply, the undersigned is to say that there is no objection in the Military Department to the proposal that the augmentation shall consist of a troop of Sikhs and a troop of Mahomedans (Ranghars and Ghukas from the Jhelum district) in each regiment, which will then consist of—

Sikhs	3 troops.
Jats	1 troop.
Rajputs	1 „
Ranghars	2 troops.
Ghukas and Pathans	1 troop.

3. The proposal that each regiment should be permitted to borrow 40,000 rupees to aid in the equipment of the additional squadrons is not approved in the Military Department. The undersigned is to forward a copy of a letter addressed to the Adjutant General in India, showing what has been ordered in regard to advances to Bengal Cavalry regiments on this account, and to say that, similarly, each regiment of the Central India Horse may be allowed an advance up to a maximum of 15,000 rupees, the amount granted to each being regulated by its circumstances, the number of recruits brought by native gentlemen, &c.; the loan to be repaid in two years.

No. 894-B., dated 9th October 1885.

4. The proposal to procure swords from England is approved of in the Military Department.

EXTRACT from the Proceedings of the Government of Bombay, Military Department (No. 5336.—Army, "Native Cavalry"; dated Bombay Castle, 13th October 1885).

Read the following :—

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Secretary to the Government of Bombay, Military Department (No. 783-B., Organisation, Native Army ; dated Simla, 16th September 1885).

I AM directed to forward, for the information of the Governor in Council, the correspondence noted in the margin, and to request that, should the course sanctioned in regard to the grant of direct commissions to native gentlemen bringing men to complete the revised establishments of Bengal Cavalry regiments be considered feasible or desirable in the Bombay Cavalry, the needful instructions may, under the orders of his Excellency in Council, be issued in continuation of the India Army Circular.

From the Adjutant General in India, No. 3038-B., dated 11th September 1885.
Military Department letter to the Adjutant General in India, No. 781-B., dated 16th September 1885.
Special India Army Circular, dated 15th September 1885.

REPORT by Brigadier General *A. L. Annesley*, Adjutant General, Bombay Army (No. 35-4-C.-9993; dated Poona, 29th September 1885).

HIS Excellency the Commander in Chief considers that if suitable candidates can be found of good family, physique, and character, the proposals of the Government of India with regard to the Bengal Army may with advantage be carried out in the Bombay Army.

Resolution.—The course sanctioned for Bengal by the Government of India should be adopted in this presidency as far as may be practicable.

2. The Government of India to be informed.

Submitted to the Government of India for information.

— No. 36. —

EXTRACT MILITARY DESPATCH to the Government of India, dated 29th October 1885, No. 279, paragraph 38.

38. THE question of the entertainment of 20 supernumeraries in every native infantry regiment, Goorkha and Assam excepted, to allow for the waste which takes place by casualties before recruiting can take place, will be considered separately.

[*In reply to the Despatch of the Government of India, dated 24th July* 1885, *No.* 121, *paragraph* 15.]

— No. 37. —

(Military, No. 275.)

The Secretary of State for India to the Governor General of India in Council.

My Lord, India Office, London, 29 October 1885.

Increase and re-organisation of the Army in India.

1. I HAVE given full consideration to the proposals contained in your Lordship's Military Letter, No. 135, dated 14th August 1885, for placing Her Majesty's forces in India, British and Native, on a footing adapted to the new conditions which they may be called on to meet.

2. The proposals affecting the British force are, briefly, to add to the permanent establishment of British troops in India,—

I.—1 battery of Horse Artillery,
2 batteries of Field Artillery,
2 batteries of Mountain Artilleery and
6 batteries of Garrison Artillery;
or 11 batteries, with 30 guns and 1,373 men of all ranks, excluding the 55 additional officers.

II.—The addition of a fourth squadron of 148 men to each of the nine cavalry regiments in India, bringing each corps up to 602, or a total cavalry increase of 1,332 of all ranks, excluding the 54 additional officers.

III.—An augmentation of 100 rank and file to each of the 50 infantry battalions now in India, bringing their strength up to 984 of all ranks, excluding officers, and an addition of three battalions of the revised strength to the existing establishment, or an increase of 7,952 men of all ranks, excluding 87 officers of the new battalions. The total British increase thus amounting to 196 officers and 10,567 men of all other ranks.

3. The cost of this augmentation, exclusive of home, depôt, and all non-effective charges, as well as of sea transport and the provision of additional barrack accommodation and departmental charges in India, is estimated at 14,26,000 rupees for the Artillery, 13,45,500 rupees for the Cavalry, and 40,99,000 rupees for the Infantry, or 68,70,500 rupees in all.

4. Your Lordship will perceive from the accompanying correspondence with the War Office* that Her Majesty's Government agree to this permanent increase of the British establishment in India of Artillery, Cavalry, and Infantry from 59,107 to 69,764, and to maintain that establishment complete.

* To War Office, 17th September 1885, M. 12,468 (*see* p. 71).
From ditto, 23rd September 1885, (*see* p. 72).
To ditto, 15th October 1885, M. 12,468 (*see* p. 74).
From ditto, 22nd October 1885, M. 6820 (*see* p. 75).

Telegram to India, 14th October 1885.

5. The

5. The arrangements for the dispatch, this trooping season, of five batteries, 2,500 drafts, and three battalions of infantry, have been already communicated to you by telegram; the remainder, viz., six garrison batteries, 1,332 cavalry, and 2,500 infantry drafts will be dispatched during the trooping season of 1886-87. Telegram to India, 29th September 1885. Telegram from India, 5th October 1885.

6. I will hereafter address your Lordship on the subject of the increase to the home depôts for cavalry and infantry which the foregoing augmentations may call for.

7. As regards the recommendations for the augmentation of the Native Armies, your Lordship's proposals have my full approval. Telegram to India, 14th October 1885.

8. Your Government have already received my sanction to their recommendation that the 17 regiments of Bengal and four regiments of the Punjab Frontier Force Cavalry, the two regiments of Central India Horse, and the six regiments of the Bombay Cavalry shall be organised in four squadrons, and brought up to a total strength of 625 natives of all ranks, the establishment of combatant British officers in each of these 29 regiments being raised from eight to nine by the appointment of an additional squadron officer. The four regiments of Madras Cavalry continuing as at present with three squadrons, but with a strength of 489 natives of all ranks in lieu of the present establishment f 387. I observe, however, that in stating the present establishment at that strength it is placed higher than is shown in the Budget Estimate for 1885-86, where the total strength of natives is estimated at 384 only, shoeing-smith pupils being apparently included in the higher estimate. Telegram to India, 14th October 1885.

9. I at the same time sanctioned your Lordship's proposal to raise three new regiments of Native Cavalry, two to be added to the Bengal, and one to the Bombay Army, each on the new strength of 625 natives of all ranks in four squadrons. The total augmentation to the cavalry thus sanctioned amounts to 4,572 natives of all ranks, and 56 British officers, with further a certain proportion of reserve which will have to be provided for the latter, to meet the requirements of casualties and leave. Excluding this reserve of officers and all non-effective charges, the estimated annual cost of the cavalry augmentation is in round numbers 25,23,000 rupees. Telegram to India, 14th October 1885.

10. I desire, however, to draw your Lordship's attention to the omission of the Guides Cavalry from the regiments to be augmented. I am of opinion that the extension to this distinguished corps of the increase which has been granted to the rest of the cavalry of the Punjab Frontier Force, and to the Central India Horse, will be a wise and politic measure, and I shall be glad to learn that your Government are able to give effect to it. Telegram to India, 14th October 1885.

11. I accord my sanction to your Lordship's recommendations for the augmentation of the Native Infantry, both temporary and permanent, as well as to the addition of three new Sikh battalions and one Muzbee Sikh battalion to the Bengal Army. The temporary increase of the existing Bengal and Punjab regiments will raise their establishment from 832 to 980 natives of all ranks, which will be maintained until 150 men have passed to the reserve, when the permanent establishment for the existing and the newly-raised regiments will be fixed at 912, the reserve consisting of 218 men per battalion. In the Bombay Army the increase will be temporary only, the strength of the battalion being raised to 912 natives of all ranks, which will be maintained until 160 men have passed into the reserve, when the battalion will revert to its present strength of 832 natives of all ranks, the reserve being kept up to 160 for each battalion. The Madras Infantry will receive no augmentation beyond the creation of a reserve of 160 men for each battalion. Telegram to India, 14th October 1885.

12. I have already sanctioned the formation of five additional Goorkha corps to serve as second battalions to those already on the establishment, and I am hopeful that this important addition to the strength of the Indian Army may be made at an early date. Telegram to India, 14th October 1885.

13. The aggregate result of the infantry increase is the permanent addition of 11,968 natives of all ranks and 63 British officers to the Bengal Army, with a further temporary increase of 4,352 to that army, and of 2,080 men to the Bombay Army, during the creation of the reserve. The total annual cost of the

the permanent augmentation, exclusive of all non-effective charges and of proportionate reserve of officers, is estimated at 25,74,000 rupees.

Telegram to India, 14th October 1885.

14. I had already, in my Despatch of 23rd July 1885, No. 192, authorised your Government to give effect to such extent as you might decide to the measure proposed in your Lordship's Military Letter of the 17th March 1885, No. 44, for the formation of an infantry reserve on the "long furlough" system, and I now agree to its extension to the whole infantry of the Army, as well as to the Cavalry, Artillery, and Sappers and Miners to the limited extent recommended by the Commander in Chief in India for these latter.

Telegram to India, 14th October 1885.

I approve also of the formation of a second reserve, composed of men of 21 years' service and upwards, to be employed on garrison duties only.

15. The strength of the first reserve is to be 218 men for each Bengal battalion, and 160 men for each battalion of the Madras and Bombay Armies. The strength of the second reserve to be unlimited, except by superannuation and the exclusion of men physically unfit; but your Lordship believes its numbers will be small.

16. The monthly pay, it is proposed, shall be the same for both classes of the reserves, viz., *Rs.* 3. 8. for privates, and 4 rupees for havildars and naiks while at their homes, but when embodied for training or called to join their battalions during a war they are to receive the full pay, with good conduct pay, which they were drawing when passed on to the reserve. The proportion of reserve non-commissioned officers is to be four havildars and four naiks to every hundred men.

17. I agree to these terms, but I observe an apparent miscalculation in the Commander in Chief's estimate of the payment to be made to the sepoy reservists, viz., 42 rupees in the year, at which rate he would receive during his month of training both his reserve and his full pay. I assume that this is not intended by your Government.

18. These rates of pay and the other regulations, contained in Appendix D. of your letter, for the employment, &c. of the reservists have my entire approval; but I would express my hope that it will rarely happen that men of such very short service as three years will be permitted to leave the colours for the reserve. The estimated annual cost of the reserve is 9,75,744 rupees, but this apparently excludes the additional reserves proposed by the Commander in Chief, as well as the second reserve and the additional non-effective charges which the measure will create.

Telegram to India, 14th October 1885.

19. The opinion expressed by your Lordship's Government and the military authorities in India is so strongly in favour of a system of linked battalions for the Native Army that I accord my sanction to the measure, and authorise your Lordship to carry out at once the reorganisation of the native infantry of all three armies upon the three-battalion system, and in the manner proposed by your Government, both as respects the British officers and the natives of the force.

20. I trust that by the introduction of the system of making the regimental promotion of British officers throughout the three battalions, but not outside the regiment, of 21 officers, one of the chief defects found in the existing organisation of single corps of seven officers will be removed.

21. I agree with your Government that the full benefit of this measure must be prospective, as the men now in the service could not be transferred to one of the linked battalions without their consent. I suggest, however, for your consideration, whether preference might not be given, in passing men to the reserve, to those who agree to serve as reservists with any one of the three battalions of which their own corps forms one. I agree also in your Lordship's conclusion that it is not necessary or desirable to alter the existing numbers of regiments. The arrangement proposed by the Commander in Chief for noting the linked battalions of each existing regiment will meet all requirements.

Telegram to India, 14th October 1885.

22. I desire to express my concurrence in the several recommendations of your Government for the improvement of the position of the native soldier. The measures proposed are, 1st, the grant of a free railway pass to each man going on

on and coming back from furlough; 2nd, the grant of the second increment of good conduct pay after six years instead of, as now, after nine years' service, and the third increment after 10 instead of 15 years' service; 3rd, the grant of full pay to all recruits on enlistment; 4th, an addition of one rupee to the yearly "half mounting" allowance of four rupees; 5th, an improvement of the present system of hutting allowances; and, 6th, a reduction of the period of service with the colours now qualifying for pension, viz., 32 years to 21 years, with the prospective abolition of the existing invalid pension after 15 years' service.

23. I authorise your Government giving effect to all of these measures at once, with the exception of that which proposes to deal with the hutting allowances of the troops. With respect to this question, I observe that your Government hope to arrive soon at a definitive conclusion as to what should be the scale of hutting accommodation necessary, and the cost at which it may be supplied, and that as soon as these points are satisfactorily settled, you will be prepared to furnish the necessary grants. The question is, I am aware, one which stands in need of settlement, but I request that the result of your inquiry may be furnished to me before any action is taken.

24. I concur in the conclusion at which your Lordship has arrived, that the Punjab Frontier Force should now be transferred to the orders of the Commander in Chief, and I accordingly sanction that measure. I should regret any measure which might tend to disturb the traditions of this most distinguished force, and I therefore observe with satisfaction that your Lordship does not propose, in transferring its control to the Commander in Chief, to alter in any degree its distinctive local character. At the same time I desire to impress on your Government the importance of preserving, as far as possible, the special connection which I understand has hitherto existed between the civil officers of the border, the force, and the militia. On this point your Lordship will doubless communicate with the Lieutenant Governor of the Punjab, and I shall be glad to be informed in some detail of the actual conclusions at which you may arrive.

25. In announcing this measure care should be taken to make the force understand that, except for the fact of their being henceforward placed on a more even footing with the Imperial Army, their actual status is in no respect altered, and I should wish your Lordship to take the opportunity of expressing the high sense entertained by Her Majesty the Queen-Empress of the loyal and gallant services which, under the Government of the province, the Punjab Frontier Force has invariably rendered to the State from the earliest period of its creation.

26. It appears to be worthy of consideration whether a similar course should not be pursued towards the Hyderabad Contingent by placing it under the orders of the Commander in Chief of the Madras Army, preserving of course its strictly local character, and such special conditions of service as attach to it. On this point I shall be glad to be favoured with an early expression of your Lordship's views, after communication with the Government of Madras and the Resident at Hyderabad.

27. In sanctioning the increase to the actual effective strength of the Indian Army, British and native, I have, as you will perceive, adopted the recommendations of your Government in preference to the larger proposals made by the Commander in Chief, to which you state his Excellency desires to adhere. In doing so I have not left out of consideration the great weight which must necessarily attach to the opinion of Sir Donald Stewart on such a point, but, as respects the British augmentation, I have acted on the full belief that Her Majesty's Government will feel bound and able in future to maintain, at its full strength, the establishment of British troops authoritatively laid down as essential for the security of India. With regard to the native army, I concur with the opinion of your Government that, through the new organisation of regiments of linked battalions and the formation of regimental reserves, the battalions required for active service will be able to be placed in the field, and maintained there at the adequate strength of 1,000 rank and file.

28. I observe that, in the opinion of your Government, any reduction of present military expenditure is only possible through the abolition of the Presidential system. This is to be regretted, because that measure could not be

carried out without an Act of Parliament being passed to give effect to it. Under existing circumstances, such a course would be, for the present at any rate, altogether impracticable, and need not, therefore, be now taken into consideration. I am not, however, satisfied that all reduction in staff and departmental charges is necessarily contingent on the abolition of the Presidential system. On the contrary, I believe that an appreciable diminution of expenditure in that direction is quite practicable under the existing organisation, and I accordingly propose shortly to address your Lordship separately on this point.

29. In connection with this question of the Presidential system, I think that until it has been decided to remove the armies of Madras and Bombay from the control of their respective Governments, it is undesirable to diminish their authority over the troops composing those armies, and I am unable, therefore, to sanction the measures in regard to the Madras and Bombay troops in Burma and Rajputana respectively proposed in paragraph 82 of your Lordship's letter.

30. Having conveyed my approval of all the recommendations of your Government for placing the army in India on such a footing as will enable it securely to meet its new responsibilities, it is not necessary to discuss the objections raised to them by the two members of your Lordship's Government who have recorded their dissent. It is a matter of deep regret to my Council and to myself that circumstances should render so large an addition to our permanent military expenditure an imperative necessity, but I am of opinion that, in the altered state of affairs, it has become inevitable, and it would, therefore, have been a satisfaction to find your Government unanimous on so important a matter. I cannot doubt, however, that, with a careful administration of the finances, the resources of the country will suffice to meet the additional burden thus placed on the revenue without undue pressure on the people; and I am, moreover, satisfied that the conviction which will be now felt in India and elsewhere as to our absolute security will not only go far towards saving India from very serious war charges in the future, but, by inducing a feeling of confidence in the stability of our rule, with its consequent freedom from anxiety, will encourage commercial enterprise, and prove of the highest value to the civil government of the country.

I have, &c.
(signed) *Randolph S. Churchill.*

[*For Enclosures to above Despatch, see pages* 71–75.]

— No. 38. —

TELEGRAM from Secretary of State to Viceroy, dated 30th October 1885.

MILITARY. Your telegram, 5th October. War Office states, owing to want of barrack accommodation here, 500 cavalry recruits must go to India this season.

The 2nd Dragoon Guards will go out four squadrons strong, "Serapis," 22nd November, and will comprise a proportion of the 500.

Do you object?

—No. 39. —

TELEGRAM from Viceroy, dated 3rd November 1885.

YOURS, 30th October. No objection to despatch of cavalry drafts, if thoroughly trained.

— No. 40. —

(20—India—30.)

LETTER from the War Office to the India Office.

Sir, War Office, 31 October 1885.

WITH reference to the letter from this Department of the 11th ultimo*, I have the honour, by desire of the Secretary of State for War, to acquaint you, for the information of the Secretary of State for India, that arrangements have been made to provide sufficient men to enable the 2nd Dragoon Guards to embark at the increased establishment of four squadrons. *See p. 71.

I am further to inform you that the additional 100 men per Infantry Regiment will be sent when possible with their own ordinary drafts in the troopships leaving this country in November and December.

I have, &c.

The Under Secretary of State for India. (signed) *H. G. Deedes.*

— No. 41. —

LETTER from the India Office to the Admiralty.

Sir, India Office, 4 November 1885.

I AM directed by the Secretary of State for India in Council to acquaint you that it has been decided to send out to India between this date and March 1886, about 6,600 troops of all arms, in addition to those proceeding as at present arranged in Indian troopships in the ordinary course of relief, and I am to request that you will place yourself in communication with the War Office with a view to the provision of freight for the number approximately given above, and cause me to be furnished with a programme of the arrangements you propose for their despatch.

2. The troops referred to consist of about 500 cavalry drafts, 5 batteries of artillery, numbering about 680 men, 2,500 infantry drafts, and 3 battalions of infantry, about 2,950 men.

I have, &c.

The Director of Transports, Admiralty. (signed) *John H. Mayo,* Assistant Military Secretary.

— No. 42. —

(120—India—4649.)

LETTER from the Horse Guards to the India Office.

Horse Guards, War Office, Pall Mall, S.W., 7 November 1885.

Sir,

I AM directed by His Royal Highness the Field Marshal Commanding in Chief to acquaint you that His Royal Highness and the Secretary of State for War have approved of the selection of the undermentioned batteries and battalions as the reinforcements which it has been decided to send to India.

I am to request you to be pleased to inform me whether the Secretary of State for India concurs:—

F. Battery, B. Brigade, Royal Horse Artillery, Canterbury to Egypt, to relieve G. Battery, B. Brigade, Royal Horse Artillery, Egypt to India.

Horses and equipment to be taken over in Egypt.

England to India.

G. Battery, 3 Brigade, Royal Artillery, } Field.
L. „ 4 „ „ }
No. 2 Battalion, 1 Brigade, Cinque Ports Division, } Garrison.
No. 1 „ 1 „ Northern Division, }
The personnel for two mountain batteries.
The above to embark about January 1886.

The

The six garrison batteries required, to embark next season.

2nd Battalion, Royal Inniskilling Fusiliers, Ireland to Malta, starting about the end of December 1885, to relieve 1st Battalion Hampshire Regiment, Malta to India.

1st Battalion Norfolk Regiment, England to Gibraltar, to relieve 1st Battalion Cheshire Regiment, Gibraltar to Egypt.

2nd Battalion Royal Dublin Fusiliers, Egypt to India, commencing early in February.

2nd Battalion Oxfordshire Light Infantry, Egypt to India, to be relieved by a battalion to be selected hereafter; commencing about the end of February.

I have, &c.
(signed) *Arthur Herbert*, Q.M.G.

The Under Secretary of State,
India Office.

— No. 43. —

LETTER from the India Office to the Horse Guards.

Sir, India Office, 14 November 1885.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 7th November 1885 (120—India—4649), and to acquaint you in reply that he concurs in the selection of the batteries of artillery and battalions of infantry approved by His Royal Highness the Field Marshal Commanding in Chief and the Secretary of State for War, as the reinforcements to be sent to India this season.

2. With regard to the conveyance of the batteries and battalions named in your letter under reply, and the 2,500 infantry drafts to proceed this season to India, I am to request that you will communicate direct with the Director of Transports, with a view to the preparation of a sketch programme for submission to the Secretary of State for India at an early date.

I have, &c.
(signed) *John H. Mayo*,
Assistant Military Secretary.

The Quartermaster General,
Horse Guards.

— No. 44. —

(M. 7041.)

LETTER from the India Office to the War Office.

Sir, India Office, 18 November 1885.

WITH reference to your letters of 23rd September 30—India—27; 22nd October, 20—India—30; 31st October, 20—India—30; I am directed by the Secretary of State for India in Council to acquaint you that the necessary communication has been made to the Admiralty in respect to the provision of transport for the troops which are to proceed to India during the present season in addition to the ordinary reliefs.

2. With regard to your statement, that in consequence of the want of accommodation and means of training in this country it will be desirable that 500 cavalry recruits should go out towards the end of the present season, and to your further statement that the 2nd Dragoon Guards will embark with the increased strength of a fourth squadron (such squadron forming presumably a portion of the above 500), I am to state that the Government of India have been communicated with by telegraph on the subject, and have replied in the following words, "No objection to despatch of cavalry drafts, if thoroughly trained," and I am to state that Lord Randolph Churchill cannot consent to the embarkation of any cavalry recruits who have not undergone an appreciable amount of training, and who do not in respect of age fulfil the conditions required for Indian service.

I have, &c.
(signed) *John H. Mayo*,
Assistant Military Secretary.

The Under Secretary of State
for War.

— No. 45. —

TELEGRAM from Viceroy, dated 17 December 1885.

YOURS, 30th October. To what regiments are 500 extra cavalry drafts distributed? How are 2,500 extra infantry drafts distributed? Information required with regard to extra accommodation required at various stations.

— No. 46. —

(M. 13,391—1885.)

LETTER from the India Office to the Horse Guards.

Sir, India Office, 18 December 1885.

I AM directed by the Secretary of State for India in Council to forward, for the information of His Royal Highness the Field Marshal Commanding-in-Chief, a copy of a telegram which has been received from India, and to request to be informed whether the particulars therein requested with regard to the distribution of the 500 cavalry and 2,500 infantry drafts proceeding to India this season can be furnished for the information of the Government of India.

17 December 1885.

I have, &c.
(signed) *John H. Mayo,*
Assistant Military Secretary.

The Quartermaster General, Horse Guards,
War Office.

— No. 47. —

(120—India—4952.)

LETTER from the Horse Guards to the India Office.

Horse Guards, War Office,
Sir, 21 December 1885.

WITH reference to India Office letter, dated 18th instant, No. M. 13,391, regarding the distribution of the extra cavalry and infantry drafts proceeding to India this trooping season, I am directed by the Field Marshal Commanding-in-Chief to acquaint you, for the information of the Secretary of State for India, that the 500 cavalry drafts (extra) are composed of 150 men of the 2nd Dragoon Guards who proceeded with the regiment, and 50 men for each of the cavalry regiments in India, except the 14th Hussars, and the Commander-in-Chief in India has been informed of this by telegram.

I am further to acquaint you that the 2,500 infantry will, it is expected, consist of 100 men for each of the following regiments:—

West Surrey Regiment.	West Riding Regiment.
Royal Fusiliers.	Border Regiment.
Norfolk Regiment.	South Yorkshire Regiment.
Devonshire Regiment.	Middlesex Regiment.
Suffolk Regiment.	King's Royal Rifle Corps.
Somersetshire Light Infantry.	Wiltshire Regiment.
East Yorkshire Regiment.	Seaforth Highlanders.
Leicestershire Regiment.	Highland Light Infantry.
Cheshire Regiment.	Royal Irish Fusiliers.
South Wales Borderers.	Munster Fusiliers.
King's Own Borderers.	4th Rifle Brigade.

And about 50 men for each of the following:—

Royal Welsh Fusiliers.	Scots Fusiliers.
Worcestershire Regiment.	Royal Sussex Regiment.
Leinster Regiment.	

After the arrival of these extra drafts, the infantry battalions receiving the full 100 men should then be of a strength of 920 rank and file each.

I have, &c.
(signed) *Redvers Buller*, D.A.G.

The Under Secretary of State for India.

— No. 48. —

(No. 4 of 1886.—Military Department.)

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Fort William, 5 January 1886.

WE have the honour to acknowledge the receipt of your Lordship's Despatch, No. 275, of the 29th October 1885, conveying the decision of Her Majesty's Government on our proposals for placing the forces in India, British and Native, on a footing adapted to the new conditions which they may be called on to meet.

2. It has afforded us much satisfaction to find that the measures to this end which we put forward, have met with such complete and hearty support from your Lordship. They were, in our opinion, no greater than were warranted by the altered circumstances of our position in India, and they were devised with a careful regard not only to this consideration, but also to the means at our disposal wherewith to meet the increased expenditure which they involved.

3. As regards the increase to the Native Army, India Army Circulars, Nos. 130 and 131 of 1885, will show your Lordship that steps have been taken to raise three new regiments of cavalry, and to bring existing regiments up to the new complement of four squadrons, except in the Madras cavalry, which regiments have an addition of 102 men, but remain organised in three squadrons. Orders have been issued for the gradual formation of four Goorkha regiments, but recruits come in very slowly, and we are now in communication with the Nepalese Government with a view to facilitate the supply of Goorkha recruits.

The formation of four new Sikh regiments, and of reserves, the increase to the Guides cavalry, the transfer of the Punjab Frontier Force to the orders of the Commander in Chief, and the grant of further concessions to the Native soldier, are under our consideration, and we shall address your Lordship hereafter on these subjects.

4. There is, however, one point to which we desire specially to invite your Lordship's attention.

In framing our proposals for an increase to the British Army in India, we made a very sensible reduction on Sir Donald Stewart's proposals, which were that it should be increased by 16,000 men, and we decided to recommend to Her Majesty's Government that the increase should be limited to about 11,000 men. We pointed out that Sir Donald Stewart asked for a nominal establishment of 75,000 men, in the belief that not more than 70,000 would be actually forthcoming, and we expressed a hope that in future Her Majesty's Government would take adequate measures to ensure that the establishment should always be kept up to its full strength. If this could be certainly assured, it is obvious that the smaller establishment would carry with it a sensible reduction in the charges for officers, establishments, barracks, and other items in India, and in the depôt and other charges in England, and it was on this ground, and in the above hope, that we recommended for the sanction of Her Majesty's Government the more moderate proposals contained in our Despatch. If, then, the reduced complement which has now been sanctioned be not kept fully complete at all times, our actual strength will be reduced to a point below what we think necessary for the defence of India, and we shall be burdened with an addition to the home expenditure for which we shall get no equivalent return.

5. To

5. To show that our anxiety on this account is not without foundation, we need only refer your Lordship to the numerous letters and telegrams of the past few years, in which we have repeatedly and earnestly begged that the regiments in this country should be brought up to their full strength. We would specially invite attention to our Despatch No. 79, of 22nd May 1885, in which we brought to notice the very serious state of things which resulted from the continuous deficiency in the supply of drafts to India.

6. We are glad to find from Major General Johnson's letter of the 15th October 1885 to the War Office, that your Lordship is fully in accord with us on this important question, and that you have impressed on the Secretary of State for War "the paramount necessity of taking adequate and unremitting "measures to ensure that the Indian establishment of British troops shall "always be kept up to its full strength, whatever that may be." We are confident that your Lordship will continue to lend your earnest support to our views on this subject, but we should be glad to receive from the War Office some definite assurance that the complement now fixed will be maintained constantly and fully at the strength which we deem essential for the safety of this country.

We have, &c.
(signed) *Dufferin.*
T. F. Wilson.
C. P. Ilbert.
S. C. Bayley.
T. C. Hope.
A. Colvin.

— No. 49. —

(No. 4831—1—412.)

LETTER from the War Office to the India Office.

Sir, War Office, 21 January 1886.

WITH reference to the enclosed copy of a communication which has been received by the Director General of the Army Medical Department from the Senior Surgeon General of the British forces in India, I am directed by the Secretary of State for War to request that you will be so good as to move Secretary Lord Randolph Churchill to cause me to be informed what augmentation of the Medical Staff in India is proposed in consequence of the augmentation of the Army there, and whether it is intended that any portion of such increase should be proceeded with this year.

I am, &c.
(signed) *Ralph Thompson.*

The Under Secretary of State for India.

Enclosure in No. 49.

(No. 4213—Establishments.)

Copy of a Letter, No. 4212, "Establishments," dated 7 November 1885, from the Surgeon General, Her Majesty's Forces in Bengal, to the Adjutant General in India, Simla.

Surgeon General's Office, Her Majesty's Forces,
Military Department, Government of India,
7 November 1885.

Referring to Military Department Letters, Nos. 961 and 1040 and 1074 (*b*) (Organization, British Army) of the 20th, 28th, and 31st October 1885, respectively, relative to the augmentation of the British Forces in India and the location of the additional troops sanctioned, I have the honour to submit, for the consideration of his Excellency the Commander-in-Chief and of the Government of India, the necessity of correspondingly increasing the Indian Establishment of executive officers of the Medical Staff.

2. Estimating the strength of the additional troops at 10,657, I beg to state that a total increase of fifty-three (53) medical officers will be necessary to the present establishment, calculated at five per 1,000 of the troops in question. This calculation is based on that sanctioned when a reduction of Medical Staff Officers was carried out in 1882–83

consequent on the formation of station hospitals, *see* correspondence (Surgeon General's Nos. 57—A, camp, dated 11th January 1882, and 343—A, camp, dated 7th March 1882, Military Department No. 460 C. (Medical Department), dated 20th March 1883).

3. As, however, only 6,635 additional troops will be sent out to India during the present trooping season, it is submitted that arrangements be made with a view to increasing the establishment of executive medical officers in India by 33 for 1885-86, leaving the balance of 20 officers to be sent during the trooping season of 1886-87.

(signed) *C. D. Madden*,
Surgeon General, Her Majesty's Forces in Bengal,
and Principal Medical Officer Her Majesty's
British Forces in India.

The Director General,
Medical Staff, War Office.

— No. 50. —

(M. 759.)

LETTER from the India Office to the War Office.

Sir, India Office, 26 January 1886.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 21st January, No. 4831—1—412, and to acquaint you in reply, that it is not proposed to take any steps towards the augmentation of the Medical Staff in India until the Government of India have reported to this Office on the question, which appears to have been brought to their notice by the senior Surgeon General of the British Forces in that country.

I am, however, to inquire whether any information has yet reached the War Office as to the answer addressed by the Government of India to Surgeon General Madden's letter of 7th November 1885.

I have, &c.
(signed) *Allen Johnson*,
Major General, Military Secretary.

The Under Secretary of State
for War.

— No. 51. —

(No. 4831—1—416.)

LETTER from the War Office to the India Office.

Sir, War Office, 29 January 1886.

I AM directed by the Secretary of State for War to acknowledge the receipt of your letter of 26th instant (No. M. 759), relative to the question of augmenting the Medical Staff for service with the British Forces in India, and, with reference to the second paragraph thereof, to acquaint you that no communication on the subject has been received in this department from the military authorities in India, excepting that of which a copy was forwarded to you in the letter from this Office of 21st instant.

Surgeon General Madden is, however, now in this country on short privilege leave, and in an interview with the Director General of the Army Medical Department on the 28th instant, he stated that the augmentation of the Medical Staff, which he had recommended, was absolutely necessary, and that on his return to India it would be his duty to press the necessity on the attention of the Government.

It is to be observed that the trooping season is drawing to a close, and also that the competitive examination for medical officers is close at hand. The advisability of an early decision of this question is therefore obvious.

I have been accordingly desired by the Secretary of State to suggest that you have the goodness to move the Secretary of State for India to cause the Government of India to be communicated with by telegraph on this subject, with a view to an early settlement of the question.

I am, &c.
(signed) *Ralph Thompson.*

The Under Secretary of State
for India.

— No. 52.

TELEGRAM to the Viceroy, dated 1 February 1886.

Do you propose any, and what increase to Army Medical Department consequent on increase to British establishment? When should it take effect?

— No. 53. —

TELEGRAM from the Viceroy, dated 15 February 1886.

YOURS, 1st. Increase of British Army Medical Department not settled; but for the present it will be sufficient if you send 20 officers before the commencement of the hot weather.

— No. 54. —

(M. 1617.)

LETTER from the India Office to the War Office.

Sir, India Office, 17 February 1886.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 29th January, No. 4881—1—416, and to acquaint you in reply that the following telegram has been received from the Viceroy, "Increase of British Army Medical Department not settled, but for the present it will be sufficient if you send 20 officers before the commencement of the hot weather."

I am to add that this application will be submitted for the approval of the Secretary of State in Council, whose decision will be duly communicated to you at the earliest date possible.

I have, &c.
(signed) *Allen Johnson*, Major-General,
Military Secretary.

The Under Secretary of State
for War.

— No. 55. —

(No. 4831—1—420.)

LETTER from the War Office to the India Office.

Sir, War Office, 19 February 1886.

I AM directed by the Secretary of State for War to acknowledge your letter of 17th instant (M. 1617), and in reply to acquaint you, for the information of the Secretary of State for India in Council, that, as the result of the recent examination of candidates for the Army Medical Staff has to be declared to-day, it is essential that a decision should be given at once regarding the proposal to increase the number of British Medical Officers in India.

Under these circumstances, 20 additional candidates at the late examination will be appointed in order to meet the increase in question, to which Mr. Campbell-Bannerman trusts Lord Kimberley will offer no objection.

I have, &c.
(signed) *Ralph Thompson.*

— No. 56. —

(M. 1817.)

LETTER from the India Office to the War Office.

Sir, India Office, 10 March 1885.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 19th February, No. 4831—1—420, and to acquaint you, in reply, that the Earl of Kimberley approves of the proposed augmentation of the British Medical Staff in India by 20 officers, who, it is understood, will be sent out before the hot weather. Lord Kimberley, I am to add, will be glad to be informed of the proportions of the several grades of the additional 20 officers.

I have, &c.,
(signed) *Allen Johnson*, Major-General,
Military Secretary.

The Under Secretary of State
for War.

— No. 57. —

(No. 4831—1—3.)

LETTER from the War Office to the India Office.

Sir, War Office, 13 March 1886.

I AM directed by the Secretary of State for War to acknowledge your letter of the 10th instant, inquiring as to the proportions of the several grades of the additional 20 Medical Officers sanctioned for India.

In reply I am to acquaint you, for the information of the Secretary of State for India in Council, that the augmentation in question will consist wholly of surgeons.

I am, &c.
(signed) *H. G. Deedes.*

The Under Secretary of State
for India.

— No. 58. —

(Military, No. 70.)

EXTRACT DESPATCH from the Secretary of State for India to the Governor General of India in Council.

India Office, London,
25 March 1886.

My Lord,

1. WITH reference to the telegrams quoted in the margin,* I have to inform your Excellency that the War Office have arranged for the despatch to India of 20 officers of the Medical Staff, who are all of the rank of surgeon, in augmentation of the Establishment in that country.

Augmentation of Medical Staff in India.

* *To Viceroy, 1st February* 1886.

"Do you propose any, and what, increase to Army Medical Department consequent on increase to British Establishment? When should it take effect?"

From Viceroy, 15th February 1886.

"Yours, 1st. Increase of British Army Medical Department not settled, but for the present it will be sufficient if you send 20 officers before the commencement of the hot weather."

3. Copy of correspondence† on the subject is enclosed for your information.

I have, &c.
(signed) *Kimberley.*

† Letter from War Office, 21st January 1886, with enclosures.
Ditto to ditto, 26th January 1886, M. 759.
Ditto from ditto, 29th January 1886.
Ditto to ditto, 17th February 1886, M. 1617.
Ditto from ditto, 19th February 1886.
Ditto to ditto, 10th March 1886, M. 1817.
Ditto from ditto, 13th March 1886.

[*For Enclosures to above Despatch, see pages* 99 *to* 102.]

— No. 59. —

EXTRACT TELEGRAM from the Viceroy to the Secretary of State, dated 17 April 1886.

IF it can be managed without disturbing arrangements already made by War Office, or charging us with extra expense, Government of India would prefer that balance of the additional Infantry sanctioned for India, amounting to 2,500 men, should be sent out during the cold weather season of 1887-88 instead of 1886-87, and that despatch of garrison artillery should be similarly postponed for a year.

— No. 60. —

TELEGRAM from the Secretary of State to the Viceroy, dated 10 May 1886.

YOURS, 17th April. Additional British troops. War Office cannot without serious inconvenience disturb arrangements on which their recruiting and this year's estimates are based. They would, however, be willing to forego, say, 50,000 *l.*, and postpone despatch of garrison batteries till 1887-88, but sending out additional Infantry drafts next season, as arranged. Would this help you?

— No. 61. —

EXTRACT TELEGRAM from the Viceroy to the Secretary of State, dated 12 May 1886.

YOURS, 11th May. In view of the difficulty attending compliance with our request for postponement of the arrival of the sanctioned Infantry till next year, we accept the proposal contained in your Lordship's telegram under acknowledgment.

— No. 62. —

LETTER from the India Office to the War Office.

(No. M. 4584.)

Sir, India Office, 15 May 1886.

I AM directed by the Secretary of State for India in Council to forward, for the information of the Secretary of State for War, the accompanying copy of a telegram, dated 17th April 1886, suggesting that, in view of the financial exigencies of the present year, the despatch of the six garrison batteries, and of the additional Infantry drafts arranged to be sent out during the ensuing trooping season of 1886-87, should be postponed until the following season of 1887-88.

On this I was authorised to place myself informally in communication with you, in order to ascertain how far, if at all, the wishes of the Government of India could be met, and learnt that the arrangements of the War Office, both in respect to finance and recruiting, would be seriously interfered with if the enlistment of the additional men required for India were stopped, and if the advance of the 200,000 *l.* agreed to be paid to the War Office were withheld.

Lord Kimberley, however, understood that Mr. Secretary Campbell-Bannerman, though unable to accept the whole of the suggestions made by the Government

of India, would be disposed, in order to meet their wishes as far as practicable, to agree to the postponement of the despatch of the six additional garrison batteries from the trooping season of 1886-87 to that of 1887-88, a reduction being made for that period of 50,000 *l.* in the advance of 200,000 *l.* above referred to. The rest of the arrangements, both for the advance and for the despatch of the other drafts of additional troops, still required to complete the revised establishment, standing as originally decided.

I am now to inform you that Lord Kimberley has ascertained by telegraph that this proposal as to the garrison batteries, and the reduction of the 200,000 *l.* by 50,000 *l.* would be acceptable to the Government of India, and I am to request that, if the Secretary of State for War concurs, effect may be given to this arrangement.

In anticipation of this concurrence, I am to express his Lordship's appreciation of the willingness shown by Mr. Campbell-Bannerman to meet the wishes of the Indian Government.

I have, &c.
(signed) *Allen Johnson*, Major-General,
Military Secretary.

The Under Secretary of State for War.

— No. 63. —

(No. 20—India—34.)

LETTER from the War Office to the India Office.

Financial Secretary's Department,
Sir, War Office, 31 July 1886.

I AM directed by the Secretary of State for War to acknowledge the receipt of Major General Johnson's letter of 15th May last, No. M. 4584, having reference to a proposal that, in view of the financial exigencies of the Indian Government, the dispatch of the balance of the additional force of 10,000 men to the Indian Establishment shall be held over until 1887-88, and that the contribution of 200,000 *l.*, which was to be paid by India during the current financial year, shall be reduced to 150,000 *l.*

In reply, I am to request you will acquaint the Secretary of State for India in Council that, on the strong representations which have been made on the subject, Mr. Secretary Campbell-Bannerman will arrange for the six garrison batteries of Royal Artillery which were shortly to have been sent to India not to be dispatched, as well as the further reinforcements for the Infantry during the present financial year, and he also proposes to submit, for the approval of the Lords Commissioners of Her Majesty's Treasury, that the payment on account of the additional force during the present financial year shall be reduced to 150,000 *l.* as proposed.

I am, however, to remark that the latter sum is only accepted as a payment on account, and it is estimated that the raising and equipment of the additional troops which have already been sent to India has entailed a charge of about 180,000 *l.* on the home exchequer.

I have, &c.
(signed) *R. H. Knox.*

The Under Secretary of State
for India.

— No. 64. —

(No. 92 of 1886.—Military Department.)

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Simla, 18 June 1886.

WE have the honour to forward the correspondence noted in the margin, showing the steps taken towards the addition of second battalions to the five existing Goorkha regiments sanctioned in your Lordship's Military Despatch, No. 117, dated 7th May 1885.

2. Your Lordship will observe that we have sanctioned the formation of four of these additional battalions, but owing to the close of the recruiting season, we have as yet actually formed second battalions only for the 1st, 2nd, and 4th Goorkha regiments. The two first require only a few men to bring them up to full strength, and the last is complete.

To Adjutant General in India, No. 263-B, dated 13th March 1885.
To Adjutant General in India, No. 169-M-R, dated 31st March 1885.
From Adjutant General in India, No. 2377-Camp, dated 4th April 1885.
To Adjutant General in India, No. 354-M-R, dated 8th April 1885.
From Adjutant General in India, No. 2485-Camp, dated 8th April 1885.
To Adjutant General in India, No. 361-M-R, dated 9th April 1885.
From Adjutant General in India, No. 830-B, dated 15th April 1885.
To Adjutant General in India, No. 187-Q-R, dated 30th April 1885.
From Adjutant General in India, No. 3710-B, dated 26th October 1885.
To Adjutant General in India, No. 1071-B, dated 30th October 1885.
To Adjutant General in India, No. 250-B, dated 12th February 1886.
Special India Army Circular, dated 26th February 1886.
From Adjutant General in India, No. 2308, dated 3rd March 1886.
To Adjutant General in India, No. 476-B, dated 19th March 1886.
Telephonic Message to Adjutant General in India, No. 454-B, dated 17th March 1886.
From Adjutant General in India, No. 1054-B, dated 3rd April 1886.
Special India Army Circular, dated 10th April 1886.
To Adjutant General in India, No. 70-B, dated 16th April 1886.

We have, &c.

(signed) *Dufferin.*
F. S. Roberts.
C. P. Ilbert.
S. C. Bayley.
T. C. Hope.
A. Colvin.
O. R. Newmarch.

Enclosures in No. 64.

From Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 263-B—"Organisation;" dated Fort William, 13th March 1885).

I AM directed to say, for the information of the Commander-in-Chief, that the Governor General in Council has decided, with the concurrence of the Secretary of State for India, to complete the four Punjab and the two Bombay Native mountain batteries to six guns each, and to add 200 men to each of the five Goorkha regiments, and to the 42nd, 43rd, and 44th Bengal Infantry.

2. I am to ask that, under his Excellency's orders, steps may be taken for the immediate enlistment of the necessary number of recruits for the five Goorkha and the three Assam regiments which are under the orders of the Commander-in-Chief.

From Secretary to Government of India, Military Department, to Adjutant-General in India (No. 169-M-R, dated Camp Rawalpindi, 31st March 1885).

HER Majesty's Government have signified their sanction to the augmentation of the Goorkha battalions, but consider that the augmentation should be effected by adding second battalions to the five existing Goorkha regiments. I am therefore to request that his Excellency may submit proposals for carrying this arrangement into effect.

2. It will be understood that the second battalions would be of the same strength as the existing battalions, namely, 912 of all ranks, and this arrangement will cancel the previous sanction for augmenting the battalions by 200 each.

3. In view of the uncertainty which exists as to the rapidity with which the additional Goorkha recruits will be obtained, and also of the fact that the formation of a second battalion will necessarily weaken the original battalion for the time to the extent of the officers and non-commissioned officers furnished to the former, it appears to the Governor General in Council that it would be preferable to attach the recruits obtained to the different regiments in succession, rather than to endeavour to raise all the five new battalions simultaneously.

It is obvious that the process of completing the five battalions will be effected quite as rapidly by the one process as the other, and the effect would be avoided of the different regiments competing with each other for what may possibly prove to be a limited number of recruits.

4. If the Commander-in-Chief concurs in this view, I am to ask that he will name the order in which he proposes to raise the five battalions.

5. On receipt of your reply, the necessary final sanction to the proposed augmentation will be notified.

From Adjutant-General in India, to Secretary to Government of India, Military Department (No. 2,377-Camp,—"Native Army, Organization;" dated Camp Rawalpindi, 4th April 1885).

I AM directed by the Commander-in-Chief to reply as follows to your letter, No. 169-M-R, of 31st ultimo, regarding the raising of the new Goorkha regiments.

2. His Excellency agrees with the Government that the new regiments should be styled, at all events for the present, second battalions of the old.

3. His Excellency also concurs in thinking that at present it is not advisable to take in hand the raising of more than one regiment. The season for procuring recruits from Nepal is now practically past, and it will not be possible to bring any large number of recruits through the unhealthy Terai until the rainy season is over, say, until about the end of next September.

4. In the meantime what recruits may be obtainable may be formed into the second battalion of the 1st Goorkhas; and, if the Government approve, his Excellency is prepared to appoint at once a commandant, a wing commander, and an adjutant for the new corps. The other officers can be added hereafter, if recruits come in, as may be necessary.

5. An order cancelling the previous instructions for the five Goorkha regiments to recruit up to a strength of 1,112 natives of all ranks will be issued.

6. It appears to the Commander-in-Chief that as the five Goorkha regiments are all under orders to take the field, the best way of raising the new regiments will be as follows:—

(1.) To put in hand the raising of the 2nd battalion, 1st Goorkhas, at once as proposed above, thus utilising any recruits that may be obtainable during the next few months.

(2.) To ask the Nepal Government to allow a recruiting depôt to be established at once at Katmandu, at which as large a body of recruits as possible should be collected during the summer months, ready to be moved down to India in the autumn as soon as the Terai is fit for travelling.

(3.) To send to Katmandu an experienced officer at once to undertake the duty of collecting the recruits, and to give him a British officer as adjutant, and as many native officers, non-commissioned officers, and men as he may think it necessary to take. These men may be drawn from the men detailed for transfer from the old to the new regiments.

(4.) The Nepal Government to be asked to allow this officer to send recruiting parties, composed of his own men, into the districts from which the Goorkha recruits are usually procured.

(5.) The Commander-in-Chief has already called on the old regiments to furnish nominal rolls of selected men for transfer to the new regiments up to the following extent, or to such less extent as may be consistent with preserving their own complete efficiency for service :—

30 sepoys for promotion to naik,
20 naiks for promotion to havildar,

and such number of havildars for promotion to jemadar, and of jemadars for promotion to subadar, as the commanding officer may think it advisable to recommend; also any subadars whose transfer may be considered to the benefit of the new regiments.

(6.) The

(6.) The native officers, non-commissioned officers, and men thus detailed for transfer to be left at the depôts when their regiments march on service, and promotions to be made in their room.

The formal sanction of Government for this is necessary.

7. It may be expected that under these arrangements if the Nepal Government are really in earnest in helping us, a large body of good recruits would be collected at Katmandu during the summer,—sufficient probably for the requirements of the five regiments, the raising and equipping of which could then be proceeded with.

8. I am to point out the advisability of definite orders on the subject of this letter being issued before the Rawalpindi Camp breaks up. The five Goorkha regiments are all named for service, and it is necessary that orders regarding their transfers to the new corps should be given before the regiments march from their stations.

From Secretary to Government of India, Military Department, to Adjutant-General in India (No. 354-M-R., dated 8th April 1885).

IN reply to your letter, No. 2377-Camp of the 4th instant, I am directed to say that it appears extremely doubtful whether any additional facilities for obtaining Goorkha recruits will be immediately available.

2. Under these circumstances, the Governor-General in Council thinks it would be a pity to weaken any of the existing regiments by forming additional battalions immediately, and that it would be preferable to see first what progress can be made in recruiting. As soon as 300 or 400 additional recruits are distinctly forthcoming for the 1st regiment, the Governor-General in Council would be prepared to sanction the formation of a second battalion to it.

3. Every endeavour will be made to carry out his Excellency's wishes for obtaining the consent of the Nepal Durbar to establish recruiting depôts in Nepal itself.
A further communication will be made on this head.

From Deputy Adjutant-General, to Secretary to Government of India, Military Department, Rawalpindi (No. 2,485-Camp,—"Native Army, Organisation;" dated Camp Rawalpindi, 8th April 1885).

WITH reference to your letter marginally quoted, I am directed by the Commander-in-Chief to inquire whether it is intended by Government that the order contained in Military Department letter, No. 263-B. (Organisation), dated 13th March 1885, for an increase of 200 men to each of three Assam regiments* is also to be cancelled.

No. 169-M. R, dated Camp Rawalpindi, 31st March 1885, paragraph 2.

*42nd Assam Light Infantry.
43rd Assam " "
44th Sylhet " "

From Secretary to Government of India, Military Department, to Adjutant-General in India, Rawalpindi (No. 361-M-R., dated Rawalpindi, 9th April 1885).

IN reply to your letter, No. 2485-Camp, of this date, I am directed to say that the order in Military Department letter, No. 169-M-R., of the 31st March 1885, was intended to apply to the three Assam regiments.

From Deputy Adjutant General, to Secretary to Government of India, Military Department, Simla (No. 830-B—"Field Operations, Organisation"; dated Simla, Head Quarters, 15th April 1885).

WITH reference to your letter, No. 361-M-R, dated 9th April 1885, I am directed by the Commander in Chief to state for the information of Government that the officers commanding the Goorkha and Assam regiments have been informed that the order for the augmentation of these regiments by 200 men is cancelled, and their recruiting parties, except those of the 1st Goorkhas, have accordingly been recalled.

2. The commanding officer of the 1st Goorkhas has been directed to keep his recruiting parties out, and to attach any men they may bring to the regiment for ultimate transfer to the new second battalion when raised.

3. I am to request the sanction of Government to this arrangement, to prevent any objection being raised by the Pay Department to pass pay to the men enlisted in excess of the establishment.

4. The strength of the four Goorkha regiments on 1st April 1885 is given in the margin.

1st	Goorkhas	5 men short.
2nd	"	10 men in excess.
3rd	"	5 " "
4th	"	5 " short.

From Officiating Deputy Secretary to Government of India, Military Department, to Adjutant General in India (No. 187-Q-B,—"Organisation, Native Army"; dated Simla, 20th April 1885).

I AM directed to acknowledge the receipt of your letter, No. 830-B (Field Operations—Organisation), dated the 15th April 1885, and in reply, to say, for the information of the Commander in Chief, that the Government of India approve of the instructions issued to the commanding officer of the 1st Goorkhas to keep his recruiting parties out, and to attach any men they may bring to the regiment for ultimate transfer to the new second battalion when raised.

From Colonel *H. Collett*, C.B., Deputy Adjutant General in India, to the Officiating Secretary to the Government of India, Military Department (No. 3710-B—"Native Army"; dated Simla, 26th October 1885).

WITH reference to the correspondence marginally noted, I am directed to forward the enclosed copy of a telegram, and to state that the Commander in Chief recommends that the 2nd Goorkhas, which is at present up to full strength, be allowed now to enlist men towards the raising of their second battalion, as was sanctioned in the case of the 1st Goorkhas.

From Government Military Department, No. 354-M-R, dated 8th April 1885.
From Adjutant General in India, No. 830-B, dated 15th April 1885.
From Government Military Department, No. 187-Q-B, dated 20th April 1885.

2. There seems no reason why the raising of two out of the five Goorkha battalions should not be actively proceeded with this cold season; and, if the Government approves, his Excellency proposes to instruct the officers commanding the 3rd and 4th Goorkhas to enlist men for the second battalion of the 1st and 2nd respectively, after their own corps have been completed to full strength.

TELEGRAM from Officer Commanding 2nd Goorkhas, to the Adjutant General in India, (dated Dehra-Dun, 21st October 1885).

MAY I recruit for second battalion when strength of first battalion is complete?

From Colonel *A. C. W. Crookshank*, Deputy Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 1071-B—"Organisation, Native Army"; dated Simla, 30th October 1885).

I AM directed to acknowledge the receipt of your letter, No. 3710-B, dated the 26th instant, and in reply to say, for the information of the Commander in Chief, that the Government of India sanction the 2nd Goorkha regiment being permitted now to enlist men towards the formation of its second battalion, and the officers commanding the 3rd and 4th Goorkha regiments being instructed to enlist men for the second battalions of the 1st and 2nd regiments after their own regiments have been completed to full strength.

2. I am to add, however, that an India Army Circular will shortly be issued sanctioning the formation of five Goorkha regiments to be second battalions of the existing corps, and that all enlistments will be for the two battalions thus linked together.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 250-B—"Organisation, Native Army": dated Fort William, 12th February 1886).

IN reply to your letter, No. 1330-Camp (Native Army), dated the 29th January 1886, I am directed to say, for the information of the Commander in Chief, that the formation of the second battalions of the 1st and 2nd Goorkha regiments may at once be proceeded with, and officers be formally posted to them.

2. A special Army Circular authorising the formation of these battalions, is forwarded herewith for the concurrence of his Excellency the Commander in Chief.

3. With reference to your No. 1372-Camp, dated the 1st February 1886, I am to say that for financial reasons it has been decided by the Government of India that only two battalions shall be raised at present, and to request that a report may be made as soon as these battalions are complete, and the remaining regiments are up to their full strength.

INDIA ARMY CIRCULARS.—[CLAUSE 28.]

Government of India—Military Department—Calcutta, the 26th February 1886.

Organisation—Native Army.

Formation of the Second Battalions of the 1st and 2nd Goorkha Regiments.

WITH the sanction of Her Majesty's Government, the Governor General in Council directs the immediate formation of second battalions to the 1st and 2nd Goorkha Regiments.

2. All enlistments will be for the first and second battalions of the regiment, and each recruit at the time of enlistment should be made to understand that he is liable to transfer in the event of war, to either of the two battalions for which he enlists.

3. To form the nucleus of these second battalions, volunteers will be called for, under the orders of his Excellency the Commander in Chief, from the 1st and 2nd Goorkha regiments. These volunteers will be subject to the same conditions as newly-enlisted recruits in respect of their liability to transfer to the linked battalion.

From Colonel *H. Collett*, C.B., Deputy Adjutant General in India, to the Officiating Secretary to the Government of India, Military Department (No. 2308-Camp—"Native Army, Organisation"; dated Fort William, 3rd March 1886).

IN forwarding the enclosed copy of a telegram from the general officer commanding Lahore Division, I am directed by the Commander in Chief to recommend that the officers commanding the 2nd battalion 1st Goorkha Light Infantry, and 2nd battalion 2nd Goorkhas may be authorised to draw advances up to 10,000 rupees each, to be recovered in the usual way from their monthly pay bills.

2. It is evident that the commandants of regiments in course of being raised, must be provided with cash to meet charges for the provision of uniform, payments on account of recruits, &c. &c.

An early reply is solicited.

TELEGRAM from General Officer commanding Lahore Division, to the Adjutant General in India (No. 166-A, dated Meean Meer; 2nd March 1886).

MAJOR ROGERS reports large batches of recruits are arriving, and funds are absolutely necessary. I recommend an advance of 10,000 rupees only.

From Colonel *A. C. W. Crookshank*, Deputy Secretary to the Government of India Military Department, to the Adjutant General in India (No. 476-B—"Advances;" dated Fort William, 19th March 1886).

I AM directed to acknowledge the receipt of your letter No. 2308-Camp (Native Army—Organisation), dated the 3rd March 1886, and in reply to say, for the information of the Commander-in-Chief, that the Government of India sanction the grant to the officers commanding the 2nd battalion 1st Goorkha Light Infantry and 2nd battalion 2nd Goorkhas of advances up to 10,000 rupees each to meet charges for the provision of uniform, payments on acconnt of recruits, &c., &c.

Telephonic Message from Secretary to the Government of India, Military Department, to the Adjutant General in India, (No. 454-B, dated Fort William, 17th March 1886).

YOUR letters, 2351 and 2491, of 4th and 9th instant. Government sanction continuance of recruiting for two more Goorkha regiments, making four in all. When these are complete, further recruiting should cease.

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Officiating Secretary to the Government of India, Military Department (No. 1054-B—"Native Army," Organisation,—dated Simla, 3rd April 1886).

WITH reference to your telephonic message, No. 454-B, dated the 17th March 1886, sanctioning the continuance of recruiting for two more Goorkha regiments, I am directed to state that the Commander-in-Chief has decided that the 2nd battalion of the 4th Goorkhas shall be raised next.

2. I am to request that an India Army Circular may be issued on an early date authorising the formation of this battalion in order that the names of the officers to be appointed thereto may be notified in G. O. C. C.

3. The Commander-in-Chief recommends that the officer commanding 2nd battalion 4th Goorkhas be granted an advance of 10,000 rupees to aid in the organisation of the battalion, as sanctioned in Military Department, No. 476-B (Advances), dated 19th March 1886, for the other newly-raised battalions.

4. The 2nd battalion 4th Goorkhas will be recruited to a strength of 912, all native ranks, and will be equipped in all respects like the 1st battalion.

5. I am to request that the different departments concerned may be authorised to supply the necessary arms, ammunition, clothing, &c.

INDIA ARMY CIRCULARS.—[CLAUSE 60.]

Government of India.—Military Department.—Simla, 10th April 1886.

Organisation—Native Army.

Formation of a Second Battalion to the 4th Goorkha Regiment.

WITH the sanction of Her Majesty's Government, the Governor General in Council directs the immediate formation of a second battalion to the 4th Goorkha regiment.

2. All enlistments will be for the first and second battalions of the regiment, and each recruit at the time of enlistment should be made to understand that he is liable to transfer in the event of war to either of the two battalions for which he enlists.

3. To form the nucleus of this second battalion, volunteers will be called for under the orders of his Excellency the Commander-in-Chief, from the 4th Goorkha Regiment. These volunteers will be subject to the same conditions as newly-enlisted recruits in respect of their liability to transfer to the linked battalion.

From Major *T. Deane*, Officiating Deputy Secretary to the Government of India, Military Department, to the Adjutant General in India,—(No. 70-B—"Organisation;" dated Simla, 16th April 1886.)

WITH reference to paragraph 3 of your letter, No. 1054-B (Native Army—Organisation), dated the 3rd April 1886, I am directed to say that the Government of India sanction the grant to the officer commanding the 2nd battalion 4th Goorkhas of an advance of 10,000 rupees to meet charges for the provision of uniform, payments on account of recruits, &c., &c.

— No. 65. —

EXTRACT from a DESPATCH to the Secretary of State for India, No. 130, dated 10 September 1886.

PARA. 7. Correspondence relative to the revision of the establishment of farriers, syces, and grass-cutters for British Cavalry regiments serving in India in consequence of the addition of a fourth squadron to each of those regiments. [*Telegram, dated India Office, the 14th October* 1885.]

From Adjutant General in India, No. 2635-Camp, dated 12th March 1886, and enclosures.
From Controller of Military Accounts, Bengal, No. 422, dated 9th April 1886.
To Adjutant General in India, No. 684-C, dated 8th June 1886.
From Adjutant General in India, No. 2557-C, dated 18th June 1886.
To Governments of Madras and Bombay, No. 858-C, dated 25th June 1886.
Telegram from Government of Madras, No. 4125, dated 9th July 1886.
From Government of Bombay, No. 2990, dated 15th July 1886.
Clause 108, India Army Circulars, 1886.

Enclosures in No. 65.

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 2635—Camp—"Establishments, British, Native;" dated Fort William, 12th March 1886).

I AM directed by the Commander-in-Chief to forward, for the orders of the Government of India, the accompanying Memorandum No. 17,893, dated 23rd February 1886, from the Controller of Military Accounts, and annexures, regarding the revised establishments for British cavalry regiments serving in India.

2. For the fourth squadron an augmentation of Native Establishments as follows seems necessary, viz.:—

2 native farriers. 1 jemadar syce.	1 hospital syce. 70 syces.	132 grasscutters.

From Lieutenant Colonel *C. J. Durand*, 1st Pay Examiner, Bengal, to the Controller of Military Accounts, Bengal (No. 1600-B-T, dated Calcutta, 17th February 1886).

THE authorised complement of non-commissioned officers of a British cavalry regiment of six troops in India, exclusive of Staff Sergeants, is as stated in the margin (*a*).

(*a*) Troop Sergeant Majors	6	
Sergeant Farriers	6	
Sergeants	18	(including 1
Lance Sergeants	4	Sergeant
Corporals	20	Rough
Lance Corporals	12	Rider.)
Trumpeters	6	
(*b*) Troop Sergeant Majors	8	
Sergeant Farriers	8	
Sergeants	24	(including 1
Lance Sergeants	4	Troop
Corporals	28	Sergeant
Lance Corporals	12	Major
Trumpeters	8	Rough Rider.)

2. The 2nd Dragoon Guards has lately arrived in India with eight troops, and a proportionate increase of non commissioned officers [*vide* margin (*b*)], except in the case of acting ranks, viz., Lance Sergeants and Lance Corporals, whose total numbers are the same as those of the authorized Indian complement for a regiment of six troops.

3. The pay of the establishment of non-commissioned officers given above has been admitted by this office; but in view of the sanctioned increase of all British cavalry regiments serving in India to four squadrons each, it seems desirable that a revised establishment of officers and non-commissioned officers be laid down, as also of syces, grasscutters, and other native establishments, except Quartermasters and Conservancy, regarding which action has already been taken (*vide* Controller's No. 17,214, dated 8th February 1886).

MEMORANDUM by Colonel *M. C. Perreau*, Controller of Military Accounts, Bengal (No. 17,893, dated Calcutta, 23rd February 1886).

FORWARDED to the Adjutant General in India, Simla, for such action as may be considered necessary.

2. The question of increasing the Quartermaster's and Conservancy establishments of British cavalry regiments is now before his Excellency the Commander-in-Chief (*vide* accompanying copy of letter No. 268-B, dated the 27th January 1886, from the Quartermaster General in India, Simla, and this Office reply, No. 17,213, dated the 8th instant).

From Major General *E. F. Chapman*, C.B., Quartermaster General in India, to the Controller of Military Accounts, Bengal (No. 268-B, dated Simla, 27th January 1886).

I AM directed by the Commander-in-Chief to forward the marginally noted communication, relative to the Quartermaster's and dry-earth conservancy establishments which should be allowed for the 2nd Dragoon Guards, which has come out from England, eight troops strong.

Sirhind Division No. 159, dated 16th January 1886.

2. As there appears to be a necessity for at once sanctioning an establishment capable of maintaining the lines of the corps in a sanitary condition, his Excellency would propose that the following additional establishments be allowed:—

Quartermaster's Establishment.

Pakhalis.	Sweepers.
4	4

Dry Earth Conservancy.

Bhistie.	Sweepers.	Bildar.	Filth Cart.
1	2	1	1

3. The establishments might at first be allowed as a tentative measure, a report as to their sufficiency or otherwise being called for on expiry of six months, so as to enable the revision of the establishments of all British cavalry regiments in Bengal being carried out previous to the arrival from England of the fourth squadron lately added thereto.

4. The favour of an early reply, and of Government sanction being obtained, if deemed necessary, is requested.

From Colonel *M. C. Perreau*, Controller of Military Accounts, Bengal, to the Quartermaster General in India,—(No. 17,213, dated Calcutta, 8th February 1886).

WITH reference to your No. 268-B, dated the 27th ultimo, the enclosure of which is herewith returned, I have the honour to state that under the circumstances sanction might be accorded tentatively by his Excellency the Commander-in-Chief to the entertainment of the additional Quartermaster's (*a*) and Dry-earth Conservancy (*b*) establishments proposed for the 2nd Dragoon Guards, which has recently arrived in this country, eight troops strong, the revision of these establishments consequent on the augmentation of British cavalry regiments serving in India being considered, as suggested, after the expiry of six months.

(*a*) Pakhalis	4
Sweepers	4
(*b*) Bhistie	1
Sweepers	2
Bildar	1
Filth cart	1

REPORT by Colonel *M. C. Perreau*, Controller of Military Accounts, Bengal (No. 422, dated Calcutta, 9th April 1886).

THE additional native establishments recommended by his Excellency the Commander-in-Chief for the 4th squadron of British cavalry regiments might, with the exception of grasscutters, who should not exceed 129 (*a*), be sanctioned by Government.

2. The complement of syces (*b*) proposed is in the authorized (*c*) proportion of one to each horse in the case of a non-commissioned officer, and 1 to 2½ horses in the case of troopers.

(*a*) Number of grasscutters allowed to British cavalry regiments before augmentation at the rate of 1 per each horse, 396 horses (*vide* clause 193, India Army Circulars, 1882)	396
Number of grasscutters required for an augmented British cavalry regiment consisting of 525 horses (India Army Circulars, Special, dated 13th March 1886)	525
Additional number required	129

(*b*) 70.
(*c*) *Vide* Military Department, No. 1379-S-D, "Horses British Cavalry," dated 14th October 1882.

From Lieutenant Colonel *E. H. H. Collen*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 684-C—"Establishments, Regimental;" dated Simla, 8th June 1886).

I AM directed to acknowledge the receipt of your letter No. 2635-Camp, "Establishments, British—Native," dated the 12th March 1886, regarding the revision of the native establishments of British cavalry regiments in India consequent on their augmentation by a fourth squadron.

2. The Commander-in-Chief proposes that for the fourth squadron the following increase to the native establishment should be allowed, viz. :—

2 native farriers. 1 jemadar syce.	1 hospital syce. 70 syces.	132 grasscutters.

I am, however, to say that, with the exception of the native farriers, the establishment proposed does not appear to have been correctly calculated.

3. As regards the jemadar and hospital syces, according to the scale in G. G. O. No. 379 of 1862 (viz., one hospital syce for every two troops, two of these syces in each regiment

regiment having the designation of jemadar syces) only two jemadars and two hospital syces were allowed to each regiment when it was previously composed of seven or eight* troops, and it is thought that no addition to these grades should be made so long as the strength of each regiment does not exceed eight troops.

*In 1860–62 - - - - - 8 troops
In 1863–70 - - - - - 7 „
From 1870 to 1885–86 - - - 6 „

4. The number of additional syces required, calculated in accordance with the scale laid down in Military Department Nos. 1379-S-D and 1579-S-D, dated 14th October and 7th November 1882, would appear to be 67, not 70 as per details in the margin.

For 20 non-commissioned officers and trumpeters at 1 horse each = 20 horses; at 1 syce for each horse = syces - -	20
For 128 privates or trumpeters minus 15 per cent. = 109 at 2½rd horses. to a syce - - - - - - - - -	47
Total for 129 horses =	67

5. The scale of grasscutters being one per horse, the additional number required for 148 men, or 129 horses, is 129 grasscutters, not 132 as proposed.

6. The total correct establishment for the present increased strength of a British cavalry regiment in the Bengal Presidency will therefore be as follows:—

8 farriers.	2 jemadar syces.	525 grasscutters.
2 hospital syces.	276 syces.	

7. A draft India Army Circular, which it is proposed to issue, publishing the revised establishment of farriers, syces, and grasscutters for British cavalry regiments in the three Presidencies is herewith forwarded for his Excellency's concurrence. The increase in the case of regiments in the Madras and Bombay Presidencies has been calculated on the basis of the authorized proportion of syces, &c., at present obtaining in those Presidencies, with reference to the establishments hitherto allowed for six troops.

From Major-General Sir *T. D. Baker*, K.C.B., Adjutant-General in India, to the Secretary to the Government of India, Military Department (No. 2557-C—"Establishments;" dated Simla, 18th June 1886).

IN reply to your No. 684-C, dated 8th June 1886, "Establishments—Regimental," the enclosure of which is herewith returned, I am directed to state that the Commander-in-Chief concurs in the draft India Army Circular fixing the establishment of farriers, syces, and grasscutters in the British cavalry regiments.

From Captain *W. J. B. Bird*, for Officiating Secretary to the Government of India, Military Department, to the Secretary to the Government of Madras—Bombay, Military Department (No. 858-C—"Establishments—Regimental;" dated Simla, 25th June 1886).

I AM directed to forward, for any remarks the Governor in Council may desire to offer, the annexed draft of an India Army Circular, which it is proposed to issue, fixing the future establishment of farriers, syces, and grasscutters of British cavalry regiments in India, and to explain that the increase in the case of regiments in the Madras—Bombay Presidency has been calculated on the basis of the authorised proportion of syces, &c., at present obtaining in that Presidency, with reference to the establishment hitherto allowed for six troops.

2. A very early reply is requested.

TELEGRAM from Secretary to the Government of Madras, Military Department, to the Secretary to the Government of India, Military Department (No. 4125, dated Ootacamund, 9th July 1886).

Your 858-C, 25th ultimo. Establishment for Madras cavalry is correctly given in Draft Circular.

EXTRACT from the Proceedings of the Government of Bombay, Military Department (No. 2920—"Establishments—Regimental;" dated Bombay Castle, 15th July 1886).

Read the following:—

Report by Brigadier-General *C. B. Knowles*, C.B., Adjutant-General, Bombay Army (No. 901–6815, dated Poona, 9th July 1886).

The Commander-in-Chief is of opinion that the proposed new establishment of native followers will suit all the requirements of British cavalry regiments serving in the Bombay Presidency.

RESOLUTION.—The foregoing report to be forwarded to the Government of India, with an expression of the concurrence of his Excellency the Governor in Council, with the view held by the Commander-in-Chief, in reply to the letter from that Government entered in the preamble.

Submitted to the Government of India in accordance with the above Resolution.

INDIA ARMY CIRCULARS.—[CLAUSE 108.]

GENERAL REGULATIONS.—British Cavalry.

Establishment of Native Farriers, Syces, and Grasscutters.

Simla, 31st July 1886.

With advertence to Clause 50, India Army Circulars, 1886, it is hereby notified, in supersession of all existing orders on the subject, that the establishment of farriers, syces, and grasscutters in British cavalry regiments serving in India will be as follows:—

Bengal	8 Native farriers. 2 Hospital syces. 2 Jemadar syces. 276 Syces (including 90 for non-commissioned officers' horses). 525 Grasscutters.
Madras	8 Native shoeing-smiths. 8 Jemadar syces. 199 Syces (including 90 for non-commissioned officers' horses). 525 Grasscutters.
Bombay	8 Native shoeing smiths. 2 Jemadar syces. 2 Hospital syces. 8 Muccadums of syces. 8 Ditto of grasscutters. 235 Syces (including 90 for non-commissioned officers' horses). 175 Grasscutters.

2. The additional establishments will be gradually employed in proportion to the actual increase in the number of horses and men.

— No. 66. —

(Military, No. 244.)

EXTRACT of DESPATCH from the Secretary of State for India to the Governor General of India in Council.

My Lord, India Office, London, 16 September 1886.

3. THE arrangements reported by you in connection with the addition of second battalions to the five existing Goorkha regiments have my approval.

I note that you have sanctioned the formation of four of these additional battalions, but that up to the date of your Despatch second battalions for the 1st, 2nd, and 4th Regiments only had been actually formed.

[*In reply to your Military Despatch, No.* 92, *dated* 18*th June* 1886.]

— No. 67. —

EXTRACT from MILITARY DESPATCH to the Government of India, dated 23rd September 1886, No. 256, paragraph 2.

2. I FORWARD herewith copy of correspondence * with the War Office, relative to the revised establishment of British regiments of Cavalry serving in India. The War Office letter states that the strength fixed in the Army Establishment Circular for the present year (June 1886, No. 106) for a Cavalry regiment in India, consisting of four squadrons, agrees with the table forwarded by you, except in the numbers of Majors and Lieutenants, which should be 4 and 15 respectively instead of 3 and 11, the latter being the numbers allowed for three squadrons only.

In the Establishment circular one regiment only, the 2nd Dragoon Guards has been given an establishment of four squadrons. A modified establishment has, for the present, been given to the other Cavalry regiments on the Indian establishment.

*To War Office, 6th July 1886, M. 6007. From ditto, 12th July 1886.

[*In reply to paragraph* 14 *of your Military Despatch, No.* 66, *dated* 17*th May* 1886, *and Military Secretary's Letter, dated* 28*th May, No.* 353B.]

— No. 68. —

TELEGRAM from the Viceroy to the Secretary of State, dated 24th September 1886.

MILITARY. Our telegram of 12th May. Additional British troops. Is any change proposed in the numbers of additional Cavalry and Infantry drafts being sent out this trooping season?

— No. 69. —

TELEGRAM from the Secretary of State to the Viceroy, dated 25th September 1886.

YOURS, 24th September. All Cavalry drafts go, but War Office hope now to retain some of the Infantry. Number yet uncertain.

— No. 70. —

TELEGRAM from Viceroy, dated 18th August 1886.

MILITARY. We consider it absolutely necessary to relieve two Native Mountain Batteries now in Burma at end of cold season, and desire sanction to raise two new batteries for this purpose as only practicable means of doing so. This increase permanent, as the batteries will be needed for Burma Garrison.

— No. 71. —

TELEGRAM from Viceroy, dated 30th August 1886.

REPLY urgently required, my Military Telegram, 18th August. Additional Native Mountain Batteries.

— No. 72. —

TELEGRAM to Viceroy, dated 1st September 1886.

YOURS, 18th and 30th August. I sanction your raising two Mountain Batteries as proposed.

— No. 73. —

TELEGRAM from Viceroy, dated 3rd September 1886.

MILITARY. Your telegram 1st. Mountain Batteries. Please send as soon as possible two captains and six subalterns, Royal Artillery, to replace officers appointed to new batteries.

— No. 74. —

TELEGRAM to Viceroy, dated 13th September 1886.

YOUR telegram in the Military Department, dated 3rd September 1886, Mountain Batteries. I have taken steps to send out six subalterns as early as possible. State names of seconded captains.

— No. 75. —

TELEGRAM from Viceroy, dated 17th September 1886.

MILITARY. Your telegram 13th. Captain C. P. Triscott, E. A. Smith, nominated for command, Mountain Batteries. Former already seconded for employment, Ordnance Department.

— No. 76. —

(No. 149 of 1886.—Military Department.)

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Simla, 27 September 1886.

WITH reference to the telegrams noted in the margin, we have now the honour to forward, for your Lordship's information, a copy of correspondence explaining the necessity for forming two new native mountain batteries to provide for the requirements of Burma.

From Viceroy, dated 18th and 30th August 1886.
To Viceroy dated, 31st August and 1st September 1886.
From Viceroy, dated 3rd September 1886.

From Quartermaster General in India, No. 2888-A, dated 30th June 1886, and No. 3300-A, dated 17th July 1886.
From Adjutant General in India, No. 3333-1, dated 28th July 1886, and No. 3644-1, dated 14th August 1886.
To Adjutant General in India, No. 1593-C, dated 3rd September 1886.
From Adjutant General in India, No. 4105-1, dated 8th September 1886.
To Adjutant General in India, No. 1689-C dated 14th September 1886.
Special India Army Circular, dated 15th September 1886.

2. There are at present six native mountain batteries in India; four belong to the Punjab Frontier Force, and two to the Bombay Army. One of the latter (No. 2) has been employed in the Quetta District for nearly two years; and, in connection with the reliefs to be carried out in 1886-87, the Bombay Government pointed out the desirability of arranging for its relief, service in Beluchistan

Beluchistan being very unpopular with native troops. The relief of this battery is not, however, possible at present, and must be deferred for a time. No. 1 (Bombay) Mountain Battery, as well as No. 4 (Hazara) Mountain Battery, Punjab Frontier Force, have been serving in Burma since October 1885. They have suffered much in health during their stay there, and are reported to be already becoming inefficient. It is therefore very necessary that they should be relieved during the next cold weather.

3. It was clear that for some time to come two native mountain batteries would be required in Burma, and it became necessary not only to arrange for the relief of the two batteries already there, but to meet the future requirements of that country. In doing so, we had to bear in mind the necessity for not overtaxing the existing native mountain batteries, and for maintaining unimpaired the conditions of service of the Punjab Frontier Force, the local character of which was so recently re-affirmed on its transfer to the Commander in Chief. His Excellency proposed that two new native mountain batteries should be raised to provide the necessary relief, and, believing this to be the best solution of the difficulty, we recommended the measure for your Lordship's favourable consideration. G. G. O. No. 485 of 1886.

The force of artillery which will be maintained as part of the permanent garrison of Burma will be considered hereafter, when the pacification and settlement of the country have been completed.

4. On receipt of your Lordship's telegram of the 1st September sanctioning the formation of these two batteries, his Excellency was requested to proceed immediately with the necessary arrangements, so as to ensure the batteries being fit for service as soon as possible. It is hoped that they will be ready by 1st March 1887.

5. It was at first thought that the batteries might be raised locally, but there is much force in the objections to the adoption of this plan mentioned in the Adjutant General's letter, No. 3333-1, dated 28th July 1886, and they will consequently be raised at Rawalpindi and Mian Mir. They will be equipped with the 7-pounder gun of 200 lbs., which is considered by the Commander in Chief to be suitable to the conditions of service in Burma. The establishments will be on the scale laid down in the Equipment Tables for Native Mountain Batteries of six guns of 200 lbs. The pay, clothing, &c., of the men will be the same as allowed to batteries of the Punjab Frontier Force. The new batteries will, however, be in no way connected with that force, but will be raised "for general service" under the designation Nos. 1 and 2, Bengal Native Mountain Batteries.

We have, &c.
(signed) *Dufferin.*
F. S. Roberts.
C. P. Ilbert.
T. C. Hope.
A. Colvin.
G. Chesney.

Enclosures in No. 76.

From Major-General *E. F. Chapman*, C.B., Quartermaster-General in India, to the Secretary to the Government of India, Military Department (No. 2888-A—"Field Operations—M"; dated Simla, 30th June 1886).

WITH reference to Military Department No. 822-C "Distribution of Army," Reliefs, dated 22nd June 1886, I am desired to invite attention to paragraph 1 of the redistribution statement forwarded to Government under cover of Quartermaster-General's No. 2802-A., dated 28th June 1886, and to say that the Commander-in-Chief thinks the proposal of the Punjab Government makes it more than ever desirable that the Government of India should at once sanction the formation of a mountain battery for special service in Burma, and the Adjutant-General has accordingly been instructed to put forward proposals for the organisation, equipment, pay, &c., of the battery in question.

2. Unless this step is taken, and a new native mountain battery is raised, the Commander-in-Chief can see no immediate prospect of the Hazara Mountain Battery being withdrawn from Upper Burma.

From Colonel *W. F. Gatacre*, Officiating Quartermaster-General in India, to the Secretary to the Government of India, Military Department (No. 3300-A—"Distribution,—Movements—Relief"; dated Simla, 17th July 1886).

WITH reference to Military Department No. 996-C "Distribution of Army," Reliefs, dated 10th July 1886, to the Secretary to Government of Bombay, copy of which was forwarded to the Quartermaster-General for information, I am directed by the Commander-in-Chief to say that, looking to the necessity of relieving the two Bombay Mountain Batteries at Duki and in Burma respectively, as well as the Hazara Mountain Battery, also on service in that country, his Excellency would wish, in modification of his views expressed in Quartermaster-General's No. 2888-A, dated 30th June 1886, to recommend, for the consideration of the Government of India, the advisability of raising two additional mountain batteries instead of one, as suggested in the letter above referred to.

2. I am to add that Sir F. Roberts, on reconsideration of the conditions of service under which these additional batteries may best be raised, has instructed the Adjutant-General to put forward, at an early date, fresh propositions regarding their organisation, pay, and equipment.

From Major-General Sir *T. D. Baker*, K.C.B., Adjutant-General in India, to the Secretary to the Government of India, Military Department (No. 3333-1—"Royal Artillery in India,"—Organisation, 7-86; dated Simla, 28th July 1886).

WITH reference to Quartermaster-General's letter No. 3300-A of the 17th instant to your address, I am directed by the Commander-in-Chief in India to state that his Excellency, having further considered the question of raising local artillery for service in Burma, has arrived at the conclusion that such a course is not practicable, for the following reason, viz.:—

I. The expense would be very great, the General Officer Commanding Burma Field Force having expressed his opinion that an increase of 50 per cent. on present pay of all ranks is necessary.

II. Owing to the unpopularity of service in Burma, there may be difficulty in obtaining officers of Royal Artillery to serve there without prospect of relief.

III. Great difficulty is anticipated in securing Punjabis, of which race it is most desirable the batteries should consist, for permanent service so far away from their homes.

2. Sir Frederick Roberts therefore recommends that two native mountain batteries be raised on the model of the artillery of the Punjab Frontier Force, both of which should be armed with four 2·5″ rifled muzzle-loading guns of 400 lbs., and two 7-pr. muzzle-loading rifled guns of 200 lbs.; the establishments, pay, &c., to be the same as for the batteries now in existence. They should be designated Nos. 5 and 6 Batteries, the present designation of the garrison battery being altered from Nos. 5 to 7.

3. Two native batteries would then be available for service in Burma to be detailed in turn from the Punjab Frontier Force and the Native Artillery of Bombay. The period might be limited to two years, and the officers and men only relieved, the cattle and the equipment being handed over to the relieving battery.

4. The Commander-in-Chief considers that these batteries could best be raised at stations where batteries of the Punjab Frontier Force are located; and should Government approve of these proposals, the general officer commanding the force will be directed to take steps to raise them, a nucleus being formed of volunteers from the present batteries.

From Major-General Sir *T. D. Baker*, K.C.B., Adjutant-General in India, to the Secretary to the Government of India, Military Department (No. 3644-1—"Royal Artillery in India,"—Organisation, 7-86; dated Simla, 14th August 1886).

IN continuation of this Department letter No. 3333-1, dated 28th ultimo, I am directed by the Commander-in-Chief in India to solicit that the sanction of the Secretary of State for India to raising the two new native mountain batteries for general service may be urged by telegram.

2. Sir Frederick Roberts now proposes to raise them at Rawalpindi and Mian Mir, so as to be entirely dissociated from the Punjab Frontier Force; but that the batteries be in every other respect on the same lines as the native mountain batteries of that force, excepting the guns which, I am directed to say, the Commander-in-Chief would wish to be the 7-pr. guns of 200 lbs., this being the gun most suitable for Burma and such like countries,

countries, where the enemy is frequently engaged, owing to jungle, at a distance of 200 yards. It is not only a more useful gun at that distance than the 2·5″, but it is more quickly limbered up and retired, should necessity arise for so doing; a very material point in guns engaged so near an enemy.

3. I am also desired to request that early sanction may be given to his Excellency to nominate officers for these two batteries, as eight more, viz., two captains and six subalterns, will be required from England to take their places; and these will have to be telegraphed for. It is, moreover, very necessary that the newly appointed officers should be enlisting natives and purchasing mules in order that there may be no delay in having these batteries ready for Burma by March 1887.

4. I am, by direction of the Commander-in-Chief, addressing another very urgent letter to you this day having reference to the purchasing of mules.

Early replies to both these communications are solicited.

From Major-General *O. R. Newmarch*, Secretary to the Government of India, Military Department, to the Adjutant-General in India (No. 1593-C—"Artillery"; dated Simla, 3rd September 1886).

IN continuation of Military Department letter No. 1418-C, dated the 18th August 1886, I am directed to say, for the information of the Commander-in-Chief, that Her Majesty's Government have now sanctioned the raising of two native mountain batteries of six guns for service in Burma. I am accordingly to ask that, under his Excellency's orders, immediate steps may be taken so as to ensure their being ready for Burma as soon as possible, not later, it may be hoped, than 1st March 1887.

2. These batteries will be raised at Rawalpindi and Mian Mir. Their pay, clothing, and general constitution will be identical with that of batteries of the Punjab Frontier Force, with which, however, they will be in no way connected, and they will be armed, as proposed, with the 7-pr. gun of 200 lbs. The establishment will be on the scale laid down in the Equipment Tables for Native mountain batteries of six guns of 200 lbs. While actually serving in Burma, free rations and foreign service batta will be granted, and the men and followers will come under the rules which govern the housing of troops and followers in that country.

3. I am to convey the sanction of the Government of India to officers being at once nominated to these batteries; they should commence recruiting operations as soon as possible. The Secretary of State will be asked by telegram to send out two captains and six subaltern officers of Royal Artillery to take the places of those appointed to the new batteries.

4. Mules should be purchased under the arrangements detailed in Military Department letter No. 1343-S-D, dated the 17th August 1886.

5. The necessary instructions will be issued to heads of all departments concerned for the supply of guns, clothing, equipment, mules, &c., and an Indian Army Circular will shortly be issued formally announcing the formation of these two batteries.

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 4105-1—"Royal Artillery in India," Organisation, 7-86; dated Simla, 8th September 1886).

IN reply to your letter, No. 1600-C, of the 3rd instant, forwarding, for the concurrence of the Commander-in-Chief in India, draft of a Special Army Circular directing the formation of two native mountain batteries, I am directed to state that his Excellency concurs therein, but would suggest, for the consideration of Government, that the words "for general service" should be substituted for the words "for service in Burma" in paragraph 1.

2. I am also to say that it would prevent confusion if the batteries were designated in the Indian Army Circular about to be published, and that Sir Frederick Roberts recommends that the battery to be raised at Rawalpindi be called No. 5, and that at Mian Mir No. 6 Native Mountain Battery.

From Major General *O. R. Newmarch*, Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 1689-C—"Artillery;" dated Simla, 14th September 1886).

In acknowledging the receipt of your letter, No. 4105-1—"Royal Artillery in India," Organisation, 7-86, dated the 8th September 1886, I am directed to say, for the Commander-in-Chief's information, that the Government of India approve of his Excellency's proposal to substitute the words "for general service" for the words "for service in Burma," in paragraph 1 of the draft Army Circular regarding the formation of two native mountain batteries. This alteration has been made in the draft Circular; but it should be explained to all ranks on enlistment that for the present their services will be required in Burma.

2. As regards the designation of the batteries as Nos. 5 and 6 Native Mountain Batteries, I am to remark that the adoption of this numbering might possibly be held to imply that they had some connection with the Punjab Frontier Force; and as this is not considered desirable, the Government of India would prefer that they should be designated Nos. 1 and 2 Bengal Mountain Batteries.

INDIA ARMY CIRCULARS, 1886.—[Clause 135.]

Government of India,—Military Department.—Simla, 15th September 1886.

The following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

Artillery.

Formation of two Native Mountain Batteries for general Service.

With the sanction of Her Majesty's Government the Governor General in Council directs the immediate formation of two native mountain batteries, of six guns each, for general service. The batteries will be designated Nos. 1 and 2 Bengal Mountain Batteries.

2. Their pay, clothing, and general constitution will be on the scale sanctioned for batteries of the Punjab Frontier Force, and they will be armed with the 7-pounder gun of 200 lbs.

3. The establishment will be as laid down in the equipment tables for native mountain batteries of six guns.

O. R. Newmarch, Major General,
Secretary to the Government of India.

— No. 77.—

(Military, No. 323.)

Despatch from the Secretary of State for India to the Governor General of India in Council.

My Lord, India Office, London, 18 November 1886.

1. I have to acknowledge the receipt of your Lordship's Military Despatch, dated 25th September 1886, No. 149, with accompanying correspondence explaining the necessity for forming two new native mountain batteries to provide for the requirements of the service in Burmah.

2. My sanction to your proposal to raise these batteries was communicated to you in my telegram of 1st September 1886, and I have now to express my approval of the orders* you have issued in respect to their formation.

*India Army Circular, 15th September 1886.

3. I note that you have decided that the batteries shall be raised for "general service," under the designation Nos. 1 and 2 Bengal Native Mountain Batteries, their armament to consist of six 7-pounder guns of 200 lbs.

I have, &c.
(signed) *Cross.*

— No. 78. —

(No. 150 of 1886.—Military Department).

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Simla, 27 September 1886.

WITH reference to Lord Kimberley's Military Despatch No. 70,* dated 25th March 1886, we have the honour to forward, for your Lordship's information, a copy of the correspondence marginally noted on the proposed augmentation of the establishment of Medical Staff officers, consequent on the recent increase to the number of British troops in India.

*See page 102.

To Adjutant-General in India, No. 454–C., dated 15th May 1886.
To Governments of Madras and Bombay, No. 882–C., dated 29th June 1886.
To Surgeon-General, Her Majesty's Forces, No. 883–C., dated 29th June 1886.
From Adjutant-General in India, No. 3595–B., dated 21st August 1886, and enclosures.
To Adjutant General in India, No. 1786–C., dated 22nd September 1886.

2. It will be seen from the correspondence noted in the margin that the establishment of the Medical Staff for India was fixed in 1882 at 300 officers, calculated at five officers per 1,000 British troops on a strength (approximate) of 60,000 men. The augmentation to the strength of the British troops in India sanctioned last year by Her Majesty's Government amounts to a total increase of 10,657 men, of whom 6,332 are merely an addition to the former strength of the existing regiments of cavalry and infantry.

To Secretary of State—
Telegram, dated 7th November 1882.
Despatch No. 289, dated 13th November 1882.
From the Secretary of State—
Telegram, dated 30th November 1882.
Despatch No 42, dated 25th January 1883.

1 battery Royal Horse Artillery	157
2 batteries Field Artillery	314
2 Mountain batteries	212
6 Garrison batteries	690
3 battalions British infantry	2,952
Increase to British cavalry	1,332
Increase to British infantry	5,000
TOTAL	10,657

3. The addition of 100 men (representing seven sick) to a battalion of British infantry, or of 148 men (representing 10½ sick) to a regiment of cavalry, does not, in our opinion, call for any increase of the Medical Staff. We have accordingly decided that the establishment of Medical Staff officers shall be increased in proportion only to the requirements of the separate units mentioned in the margin that have been added to the army. The strength of these amounts to 4,467 of all ranks, including officers, and the number of medical officers required for this force, calculated on the existing scale of five medical officers per 1,000 troops, is 22 officers, of whom 20 have already arrived in the country.

1 battery Royal Horse Artillery	162
2 batteries Field Artillery	324
2 Mountain batteries	222
6 Garrison batteries	720
3 battalions British infantry	3,039
TOTAL	4,467

4. Should your Lordship concur in the decision at which we have arrived, we beg that the two officers required to complete this establishment may be sent out in the trooping season of 1887–88, when the garrison batteries are expected to arrive.

We have, &c.
(signed) *Dufferin.*
F. S. Roberts.
C. P. Ilbert.
T. C. Hope.
A. Colvin.
G. Chesney.

Enclosures in No. 78.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India (No. 454-C., "Medical Department," Officers, dated Simla, 15th May 1886).

In continuation of Military Department, No. 519-C., dated the 2nd March 1886, and No. 128-C., dated the 17th April 1886, I am directed to say, for the information of the Commander-in-Chief, that the Government of India will be glad to receive an expression of the views of his Excellency as to the number of additional officers of the medical staff required for the British troops serving in India consequent on the recent increase to those troops which has been sanctioned by Her Majesty's Government.

From Lieutenant Colonel *E. H. H. Collen*, Officiating Secretary to the Government of India, Military Department, to the Secretary to the Government of Madras, Bombay, Military Department (No. 882-C., "Medical Department," Officers, dated Simla, 29th June 1886).

With reference to your letter, No. 1,792, dated 20th March 1886, letters Nos. 1,247, dated 18th March, and 1,963, dated 5th May 1886, I am directed to say, for the information of the Governor in Council, that, pending a decision on the question of the future establishment of medical staff officers to be maintained in India, a point which is now under consideration, the Government of India have decided, in modification of Military Department letter, No. 519-C., dated 2nd March 1886, to make the following temporary redistribution of the present establishment of 320 officers between the three Presidencies, viz.:

Bengal	201
Madras	68
Bombay	51

2. This allotment is based on a calculation of the established strength of the British troops, including officers, at present serving in each presidency, those in the Quetta district being included in the Bengal establishment. For the purpose of this calculation, the former established strength of each arm has been taken, with an addition of 50 men per regiment of cavalry and infantry. The statement entered in the margin, which has been prepared on this basis, shows that out of a total strength of 68,285 for all India there are in :

	Bengal.	Madras.	Bombay.
Royal Horse Artillery at 162	7= 1,134	2= 324	2= 324
Field - - „ 162	21= 3,042	10= 1,620	11= 1,782
Garrison - - „ 120	9= 1,080	4= 480	4= 480
Heavy - - „ 100	2= 200	1= 100	1= 100
Mountain - „ 111	7= 777	1= 111	—
Cavalry - - „ 528	6= 3,168	2= 1,056	1= 528
Infantry - - „ 963	34= 32,742	11= 10,593	8= 7,704
Engineers - - -	288	114	93
Veterans and Invalid Establishments.	14	66	5
Total - -	42,805	14,464	11,016
Grand Total - -	68,285		

Bengal	42,805
Madras	14,464
Bombay	11,016

3. Dividing the establishment of 320 medical staff officers in the proportion that the number of troops in each presidency bears to the total, the allotment is, as stated above:

Bengal	201
Madras	68
Bombay	51

The present strength of officers in the three presidencies appears to be as follows:

Bengal (including Quetta)	213, or 12 in excess.
Madras	61, or 7 short.
Bombay	46, or 5 short.

Orders will accordingly be issued for the transfer of the 12 surplus officers on the Bengal establishment to the Madras and Bombay presidencies to supply the deficiencies above shown.

From Lieutenant Colonel *E. H. H. Collen*, Officiating Secretary to the Government of India, Military Department, to the Surgeon General, Her Majesty's Forces, Bengal (No. 883-C., "Medical Department, Officers," dated Simla, 29th June 1886).

IN continuation of Military Department letter, No. 519-C., dated 2nd March 1886, and with reference to your letter, No. 1436, dated 20th May 1886, I am directed to forward a copy of a letter* addressed to the Governments of Madras and Bombay, making a temporary redistribution of the present establishment of 320 medical staff officers between the three presidencies, and to ask that you will arrange for the transfer to the Madras and Bombay presidencies of the 12 officers who, as therein shown, are in excess of the allotment to the Bengal presidency, seven being made over to Madras and five to Bombay.

* No. 882-C., dated 29th June 1886.

Copy of the above, and of its enclosure, forwarded, in continuation of Military Department letter, No. 519-C., dated the 2nd March 1886, to:

The Adjutant General in India.
The Controller of Military Accounts, Bengal.
The Accountant General, Military Department.

From Major General Sir *T. D. Baker*, K.C.B., A.D.C., Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 3595-B., "Medical Department," dated Simla, 21st August 1886).

WITH reference to Military Department letter, No. 454-C., dated 15th May 1886, and subsequent reminders, I am directed by the Commander-in-Chief to forward, for the consideration and orders of Government, the accompanying letter,* No. 2775, dated the 13th August 1886, from the Surgeon General, Her Majesty's Forces, on the subject of the inadequacy of the present establishment of medical staff officers in India.

* Return requested.

2. I am to say that this question has received the most careful and earnest consideration of the Commander-in-Chief, and that in view of our possible requirements at any time for service in the field, his Excellency is of opinion that it would be very unwise to reduce the establishment below five officers per 1,000 troops, or, in other words, four officers per 1,000 troops, *plus* 25 per cent. reserve.

3. The Commander-in-Chief, I am to add, was most anxious, for financial reasons, to be able to recommend a reduction to four officers per 1,000 troops with a reserve of 20 per cent.; but the difficulties recently experienced in supplying the medical wants of Burmah, which have necessitated all leave out of India to medical officers being stopped, clearly prove to his Excellency that the present establishment is insufficient to ensure the maintenance of the medical service in a thoroughly efficient state, more especially as at any time complications might arise which would necessitate our sending more troops into the field on some other portion of our Indian frontier.

From *C. D. Madden*, Esq., Surgeon General, Her Majesty's Forces, Bengal, to the Adjutant General in India (No. 2775, "Establishments," dated Simla, 13th August 1886).

REFERRING to our conversation of the 10th instant, I have the honour to submit, for the consideration of his Excellency the Commander-in-Chief, a *résumé* of the correspondence which has taken place on the question of the establishment of medical staff officers for service in India.

2. When the station hospital system was established, it was decided to fix the establishment at five medical officers per 1,000 troops, including the reserve. This scale was approved by his Excellency the Commander-in-Chief and the Government of India, and, moreover, was accepted by the late Sir William Muir, the then Director General of the Army Medical Department.

3. When it was decided to augment the strength of the British Army in India, application was made for proportionately increasing the number of medical officers and, pend-

ing a settlement of the general question, the Government of India sanctioned an augmentation of 20 medical officers for the additional British troops which arrived during 1885-86.

4. Taking the authorised strength of the British Army at 73,500, an establishment of 368 medical officers is required, calculated at five per 1,000 troops; but, owing to the urgent need for reducing public expenditure, it was suggested that the establishment be reduced to four medical officers per 1,000 troops, with a reserve of 20 per cent., which gives 353 officers.

5. The statement showing the proposed distribution of medical staff officers to the several stations in the three presidencies, and forwarded with this office, No. 2433, dated 23rd July 1886, does not include the requirements of the additional troops yet to arrive in India.

6. Assuming that two army corps were employed on field service against an Asiatic foe, it is estimated that 190 medical officers would be required for active service, while, on the other hand, if operations were conducted against a nation equally well equipped in arms as ourselves, the number of medical staff officers would have to be increased to 260. To meet these demands, it would be necessary (assuming that the Indian Establishment was fixed at 353) to obtain from England an augmentation of 40 or 110 medical staff officers, according to the nature of the service. It should, however, be borne in mind that if India is engaged in a large war across the frontier, there is the likelihood that England will, at the same time, be similarly employed in Europe, in which case it is for consideration whether England would be in a position to assist India with medical officers.

7. If the Government of India recognise the strength of the medical staff to be 314* before the augmentation, the requirements for the additional regiments will be 19 medical officers, including a reserve, and for augmentation to regiments 20 medical officers, including a reserve. If, on the other hand, the old establishments is fixed at 300 only, then a corresponding increase in the latter number (20) must be made.

* 5 per 1,000 troops for 62,829.

8. In conclusion, I beg to state that the efficiency of the medical staff is already impaired; with only a small force in the field, it has been necessary to stop all leave out of India, and latterly some of the officers on leave in India have been recalled. Moreover, the unhealthy season is approaching, and intimation has been received that a number of medical staff officers in Upper Burmah have broken down in health, and must be relieved. Unless additional officers are therefore sanctioned, the present difficulties will increase; and should unusual sickness break out, it will be impossible to meet the demands of the service. Further, as all leave is being stopped, there will be increased sickness amongst the medical officers.

— No. 79. —

EXTRACT from a DESPATCH to the Secretary of State for India, No. 168, dated 25th October 1886.

Paragraph 27. Correspondence regarding the formation of a second battalion of the 5th Goorkha Regiment. [In continuation of Military Despatch, No. 92,* dated the 18th June 1886.]

From Adjutant General in India, No. 4047-B., dated 15th September 1886.
Military Department, No. 1368-B., dated 28th September 1886.
Special India Army Circular, dated 1st October 1886.

* *See* page 105.

Enclosure in No. 79.

From Major-General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to the Secretary to the Government of India, Military Department (No. 4047-B., "Native Army, Recruiting," dated Simla, 15th September 1886).

I AM directed to report for the information of Government that 2nd battalions have been raised for the 1st, 2nd, and 4th Goorkhas, but that there appears to be no prospect of obtaining a sufficient number of suitable recruits through the agency of the Nepal Durbar during the coming cold season to complete the formation of two additional Goorkha battalions (2nd battalions to the 3rd and 5th Goorkhas).

2. Under

2. Under these circumstances, the Commander in Chief desires strongly to advocate that immediate steps be taken to raise a 2nd battalion to the 3rd Goorkhas by enlisting Gurhwallis, whose many good qualities as a fighting class have been amply borne testimony to by such experienced officers as his Excellency Lieutenant-General Sir H. T. Macpherson, K.C.B., K.C.S.I., V.C., Lieutenant-General the Honourable Sir H. Ramsay, C.B., K.C.S.I., Major-General J. I. Murray, C.B., Brigadier-General T. E. Gordon, C.B., C.S.I., Colonel J. F. L. Fisher, Commissioner of Kumaon, Colonel H. H. Lyster, C.B., V.C.

3. Very careful inquiries have been made from officers experienced with Goorkhas, and the general opinion is in favour of a Gurhwalli regiment. Some of the best men in our Goorkha regiments come from Gurhwal, and all that is necessary is for care to be taken in enlisting so that the proper class of recruits may be obtained. On this subject I am to invite a reference to this office letters marginally quoted.

No. 630, "Camp," dated 28th December 1885.
No. 1329, "Camp," dated 29th January 1886.

4. The Commander in Chief also solicits sanction to commence the formation of a 2nd battalion of the 5th Goorkhas by calling for volunteers from the present regiment and from the Assam regiments (the numbers volunteering from each regiment being limited, say to 150), the battalion being completed during the cold season by the enlistment of recruits from Nepal.

5. His Excellency earnestly hopes that Government will sanction the formation of these two new battalions during the present cold season. At least two years must elapse before a newly formed regiment can take the field.

6. I am to request the favour of a very early reply, as it is most desirable that orders should be issued at once, in order that arrangements for officers and recruiting may be made.

The Secretary to the Government of India to the Adjutant General in India.

(No. 1368-B.—Government of India.—Military Department.)

Sir, Simla, 28 September 1886.

In reply to your letter, No. 4047-B., "Native Army, Recruiting," dated the 15th September 1886, I am directed to say, for the information of the Commander in Chief, that the Government of India sanction the formation of a 2nd battalion to the 5th Goorkha Regiment, but, with reference to the correspondence ending with your No. 1054-B., dated 3rd April 1886, regret to be unable at present to sanction his Excellency's proposal to raise a 2nd battalion to the 3rd Goorkhas by enlisting Gurhwalis.

2. The proposal that volunteers should be called for from the 5th Goorkhas and from the Assam regiments is approved, but the Government of India consider that the number of volunteers from each corps should be limited to 100, the new battalion being completed by the enlistment of recruits from Nepal.

3. An India Army Circular notifying the formation of the battalion will shortly be issued.

4. Advances may be made to the officers selected to raise the battalion and to enlist recruits, as in the case of the regiments already raised. The rules as to pay of officers transferred to this battalion will also be the same as on the previous occasions.

I am, &c,
(signed) *O. R. Newmarch*, Major-General,
Secretary to the Government of India.

Copy forwarded to—
The Director General of Ordnance in India.
The Superintendent and Agent for Army Clothing, Bengal.
The Surgeon General with the Government of India.
The Surgeon General, Her Majesty's Forces.
The Controller of Military Accounts, Bengal.
The Accountant General, Military Department.

By Order,
(signed) *T. Deane*,
Deputy Secretary to the Government of India.

[Special.—Applicable to Bengal only.]

INDIA ARMY CIRCULARS.—1886 [Clause 171].

Government of India, Military Department,
Simla, 1 October 1886.

THE following regulations and instructions are promulgated by direction of the Right Honourable the Governor General of India in Council.

ORGANISATION.—NATIVE ARMY.

Formation of a Second Battalion to the 5th Goorkha Regiment.

WITH the sanction of Her Majesty's Government, the Governor General in Council directs the immediate formation of a second battalion to the 5th Goorkha regiment.

2. All enlistments will be for the first and second battalions of the regiment, and each recruit, at the time of enlistment, should be made to understand that he is liable for transfer, in the event of war, to either of the two battalions for which he enlists.

3. To form the nucleus of the second battalion, volunteers will be called for, under the orders of his Excellency the Commander in Chief, from the 5th Goorkha Regiment, and from the three Assam regiments. These volunteers will be subject to the same conditions as newly-enlisted recruits in respect of their liability to transfer to the linked battalion.

(signed) *O. R. Newmarch*, Major General,
Secretary to the Government of India.

— No. 80. —

(No. 172 of 1886.—Military Department.)

DESPATCH from the Government of India to the Secretary of State for India.

My Lord, Simla, 25 October 1886.

IN continuation of our Despatch, No. 4, of the 5th January 1886, we have the honour to forward herewith, for the information of Her Majesty's Government, copy of Special India Army Circular, dated the 13th October 1886, making certain changes in the conditions of service of the native armies in India.

2. In this circular we have notified all the measures for improving the position of the native troops sanctioned in Lord Randolph Churchill's Despatch,* No. 275, of the 29th October 1885, merely reserving for further consideration the question of hutting accommodation.

3. For financial reasons, we have decided to restrict the formation of reserves in the first instance to 100 men in the infantry of the Bengal Army and Punjab Frontier Force.

We have, &c.
(signed) *Dufferin.*
C. P. Ilbert.
T. C. Hope.
A. Colvin.
G. Chesney.
J. B. Peile.

[Special.—Applicable to the three Presidencies.] INDIA ARMY CIRCULARS, 1886.
[Clause 170.]

Government of India, Military Department; Simla, the 13th October 1886.

The following Regulations are promulgated by direction of the Right Honourable the Governor General in Council:—

ORGANISATION—NATIVE ARMY.

CHANGES in the Conditions of Service of the Native Armies in India.

WITH the sanction of the Secretary of State for India, the Governor General in Council notifies the following regulations affecting the conditions of service of the Native soldier in India:—

Linked Battalions.

1. The Native infantry regiments of the three Presidencies, including those of the Punjab Frontier Force, will be linked together in regiments of three battalions each, with the exception of certain corps which will be linked together in regiments of two battalions each.

Local regiments will remain on their present footing,

2. All enlistments in any battalion, after the 30th November 1886, will be made for both or for all three battalions; that is to say, a recruit enlisted for one battalion of a regiment will be liable to serve in the other battalions of the regiment, and will be transferred thereto if required in case of war. Beyond this liability to transfer to a linked battalion during war, the conditions of the Sepoy's enlistment will remain as at present.

3. No alteration will at present be made in the numbers or designations of regiments. The liability to transfer will only come into force on one or two of the battalions being ordered on service. During peace time there will be no change either in the organisation of the regiments or in the conditions of the Sepoy's service. In detailing troops for field service, one or more of the battalions of a regiment will be left in cantonments; when warned for service, the battalion so warned will at once make up its strength to 1,000 effective rank and file by transfers of men, enlisted under the new conditions specified in this order, from the other battalions of the regiment. The other battalion or battalions will simultaneously be recruited to the extent required to replace the men so transferred. The linked battalions will thus supply trained soldiers to fill the ranks of the battalions in the field during the continuance of war. The depôt of the battalion on service will, when practicable, be attached to one of the battalions of the linked regiment.

4. In the Bengal Presidency the regiments will be linked as follows:—

Bengal Infantry.

1st, 2nd, and 3rd.	25th, 27th, and 28th.
4th, 5th, and 6th.	29th, 30th, and 31st.
7th, 8th, and 9th.	39th and 40th.
10th, 11th, and 12th.	42nd, 43rd, and 44th (Assam).
13th, 16th, and 17th.	1st Goorkhas, 1st and 2nd battalions.
14th, 15th, and 45th (Sikhs).	2nd " " "
18th, 33rd, and 38th.	3rd " " "
19th, 22nd, and 24th.	(2nd batt. will be raised hereafter.)
20th, 21st, and 26th.	4th Goorkhas, 1st and 2nd battalions.
23rd and 32nd Pioneers.	

Punjab Frontier Force.

1st, 3rd, and 4th Sikhs.
1st, 4th, and 5th Punjab Infantry.
2nd Sikhs, 2nd, and 6th Punjab Infantry.
The Guide Corps.
5th Goorkhas, 1st and 2nd battalions.

The linking of the Madras and Bombay regiments will be notified hereafter.

Reserves.

5. The formation of a system of reserves for the Native army, details of which are notified in the Appendix to this Circular, has also received the sanction of Her Majesty's Government.

The measure will be introduced at first only into the infantry of the Bengal Army and Punjab Frontier Force.

Railway Passes to Furlough Men.

6. The Governor General in Council is pleased to grant free conveyance by railway to and from the stations nearest to their homes to all Native commissioned and non-commissioned officers and men of the Native army proceeding on furlough. They will travel on warrants which will be issued under the instructions of the Commander in Chief in India, Madras, and Bombay. When on temporary leave they will pay own their expenses as heretofore.

7. Free transport by rail is not admissible for the horses of the Native cavalry.

8. This concession has already been notified with effect from 1st January 1886.

Recruit Pay.

9. All recruits for the Artillery, Madras cavalry, Sappers and Miners, and Infantry, enlisted elsewhere than at regimental head-quarters, will receive full pay from date of enlistment, as well as marching batta or free carriage for the conveyance of their baggage (according to the regiment for which they are enlisted), to date of joining the regiment.

Good-conduct Pay.

10. The second rate of good-conduct pay, 2 rupees per mensem, now allowed after 9 years' service, will be given after 6 years' service, and the rate, 3 rupees per mensem, now allowed after 15 years' service, will be given after 10 years' service. This change applies only to the following troops:—Artillery, Viceroy's body guard; cavalry (except the Bombay cavalry), Infantry, Sappers and Miners, Central India Horse, Deolee and Erinpoora force, Merwarrah battalion, Meywar and Malwah Bheel Corps, Bhopal battalion and Nepal escort. It does not apply to the Hyderabad Contingent.

Half-Mounting.

11. The annual allowance in aid of half-mounting is raised from four rupees to five rupees, with effect from the 1st of January 1887.

Pensions.

12. The present invalid pension after 15 years is abolished prospectively for all soldiers enlisted after the 30th November 1886, and in lieu thereof the ordinary pension will be granted to all soldiers on completion of 21 years' service in the regular army. The ordinary pension is also admissible after 21 years' service to all men now in the army. The superior rate of pension will continue to be granted after 32 years' service under the present rules. This change does not apply to strictly local corps.

13. The scale of gratuities for short-service commissioned and non-commissioned officers and soldiers enlisted after 30th November 1886, who may be discharged as unfit for further service, is extended as follows:—

Above 15 and under 21 years' service, a gratuity of 12 months' pay of rank, including good-conduct pay.

O. R. Newmarch, Major-General,
Secretary to the Government of India.

APPENDIX.

ORGANISATION OF RESERVES.—BENGAL ARMY.

1. Two reserve forces will be formed in the Bengal Army, viz., an active reserve and a garrison reserve, both limited at present to the infantry.

2. The active reserve will be formed of men who may be transferred to the reserve after not less than five, or more than 12 years' service with the colours; its numbers will be limited at present to 100 men per battalion.

3. No men are to be passed into the reserve unless certified by a medical officer as physically fit, and approved by the commanding officer of their regiment. Selections for transfer to the reserve will be made with reference to length of service, the senior applicants having the preference

4. No

4. No men are to be passed into the active reserve if the regiment is on active service, or is more than five per cent. below its established strength, including recruits.

5. Non-commissioned officers and men in the active reserve will be liable for field service with any one of the battalions linked with their own battalion.

6. The garrison reserve will be formed of soldiers who have been pensioned after 21 years' service under the new rules, or of men belonging to the active reserve who have completed a total colour and reserve service of not less than 21 years.

7. No man will be accepted for the garrison reserve unless certified by a medical officer as physically fit for the performance of garrison duties, and approved by the commanding officer of the regiment to which he belongs.

8. Short-service soldiers who have been already discharged with gratuities may also be accepted for the garrison reserve on re-attestation, if certified as fit by a medical officer, and approved by the commanding officer of the battalion. Such men must refund the gratuities which they have received before they can be enrolled in the garrison reserve, after which they will be entitled to the rates of pay laid down in paragraph 14.

9. The garrison reserve is unlimited in number.

10. Men belonging to the garrison reserve are not liable for service beyond the frontier of British India; they will be employed only on garrison duty within the frontier.

11. All records and documents relating to reserve men will be kept in the battalion to which they belong; an office allowance of 30 rupees per mensem will be granted for this purpose. Rolls of reserve men are to be kept in the form on the first page of the sheet roll (Bengal Form A—R. 12), and copies of these rolls must be furnished to the civil officers of the districts in which the men live.

12. The arms and accoutrements of the active reserve men will be kept with the battalion head-quarters, and their training will be carried out with that one of their linked battalions of the regiment which may happen to be quartered nearest their homes. In cases where this is impracticable, special orders will be issued for the training being carried out elsewhere. Arms and accoutrements will not be issued for the garrison reserve men, for whose training the spare arms in regimental charge will be utilised.

13. One havildar and one naick will be allowed in each class of reserve for every section of 25 men or fraction thereof, exceeding one-half.

This staff will be maintained either by transfer of non-commissioned officers from the battalion to the reserve, or by promotion of privates in the reserve, at the discretion of commanding officers in each case.

14. Men (not being pensioners) of both reserves while at their homes will receive the following rates of pay :—.

	Rs.	*a.*	*p.*	
Havildars - - - - - - - - -	4	–	–	a month.
Naicks - - - - - - - - -	3	8	–	„
Sepoys - - - - - - - - -	3	–		„

Pensioners who join the garrison reserve will draw their pensions with an addition thereto of one rupee per mensem for sepoys, and 1 rupee 12 annas for havildars and naicks.

15. Reserve men going to, and returning from, their training will be granted free passes by rail and marching batta at the rate of two annas per 15 miles for such part of the journey as cannot be done by rail.

16. While embodied for training, or when called up for service during a war, men of both reserves will receive the full pay and good-conduct pay which they were drawing when first transferred to the reserve; while thus drawing full pay, the reserve pay (paragraph 14), and pension pay in case of pensioners, will, of course, lapse.

17. Reserve men will be paid their reserve pay in arrears by commanding officers when embodied for training, one-half of the arrears due being paid to each man on first muster, and the balance, with the full pay and good-conduct pay specified in paragraph 16, at the end of the training.

18. The active reserve will be embodied for training for one month in every year at such date as may be directed by the general officer commanding the division or district in which the battalion is quartered. The garrison reserve will be embodied for training for one month in every alternate year under similar regulations.

19. During the training all the reserve men will be examined by a medical officer, and men found unfit will be transferred to the pension list (paragraph 21), or discharged with gratuity (paragraph 20), or transferred from the active to the garrison reserve (paragraph 6), as the case may be.

20. Gratuities on the following scale will be allowed to reserve men who are discharged as unfit, and who are not entitled to pension:—

	Number of Months' Full Pay of Rank and Good Conduct Pay.
Men of—	*Rs.*
5 years' but less than 10 years' colour and reserve service - -	3
10 „ „ 15 „ „ „ - -	6
15 „ „ 20 „ „ „ - -	9
20 „ „ 25 „ „ „ - -	12

21. Men of the garrison reserve become entitled to an invalid pension on completing a total colour and reserve service of 25 years, at the following rates:—

	Rs.	*a.*	*p.*	
Havildars - - - - - -	5	8	–	a month.
Naicks - - - - - - -				
Sepoys - - - - - - -	3	8	–	

Pensioners (paragraph 14) who may be invalided as unfit for garrison duty will revert to their original pensions.

22. Men on passing into the reserve will be provided, as a free issue, with the following articles, which will be of regimental pattern, and will be kept in store at regimental head-quarters:—

1 Puggri.
1 Khaki blouse.
1 Pair pyjamas.
1 Pair putties.
1 Pair native shoes.

These articles will be renewed as required under regimental arrangements, the cost being recovered on a contingent bill.

The clothing in wear of men passing into the reserve will be left in regimental store for use during training, or when called out for service.

28. Reserve men called out for service will be supplied by Government with great coats, water-tins, havresacks, and such other articles of equipment as the nature of service may necessitate.

No. 81. —

(No. 20—India—41.)

LETTER from the War Office to the India Office.

Sir, War Office, 20 October 1886.

WITH reference to previous correspondence, I have the honour, by direction of the Secretary of State for War, to annex hereto a list of the Cavalry regiments in India to which a fourth squadron has still to be added, showing their strength, including the drafts which have already embarked, and deducting invalids and time-expired men expected to return home this season.

I am at the same time to inform you that there is every prospect of sufficient further drafts being sent out during December, to complete the increased establishment, with the exception of that of the 7th Dragoon Guards, which, however, it is also hoped to complete before the end of this trooping season.

Under these circumstances Mr. Secretary Smith proposes, should the Secretary of State for India concur, to proceed at once with the promotion and appointment of the necessary officers and non-commissioned officers in and to each of these regiments, to complete the fourth squadron.

I have, &c.
(signed) *H. G. Deedes.*

The Under Secretary of State for India.

	Non-Commissioned Officers and Men.		
	Establishment at present.	Strength.	New Establishment.
1st Dragoon Guards - - - - - - - -	502	533	600
3rd „ „ - - - - - - - - -	502	517	600
7th „ „ - - - - - - - - -	502	429	600
8th Hussars - - - - - - - - -	502	558	600
17th Lancers - - - - - - - - -	502	590	600
6th Dragoon Guards - - - - - - - -	502	560	600

— No. 82. —

(M. 10,686.)

LETTER from the India Office to the War Office.

Sir, India Office, 28 October 1886.

I am directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 20th October 1886, No. 20—India—41, and to acquaint you in reply that Viscount Cross sanctions the appointment of the additional lieutenants for the regiments named in your letter,* but is unable to sanction the promotions in the several corps unless, before or by the close of the present trooping season, they are completed to the revised strength or do not fall short of it by more than 20 privates.

*1st Dragoon Guards.
3rd „ „
6th „ „
7th „ „
8th Hussars.
17th Lancers.

His Lordship will, however, sanction the promotions in the case of a regiment which before the 31st December of this year has a strength joined or actually embarked coming within 40 of the new establishment, but only on the understanding that it will receive the additional needful complement of not less than 20 privates during the remainder of the trooping season. The proviso will, in either case, of course, exclude invalids and time-expired men.

I have, &c.

(signed) *Allen Johnson*, Major General,
Military Secretary.

The Under Secretary of State for War.

— No. 83. —

(No. 20—India—43.)

LETTER from the War Office to the India Office.

Sir, War Office, 13 November 1886.

I AM directed by the Secretary of State for War to acknowledge the receipt of your letter of the 28th ultimo, M. 10,686, and to transmit, for the information of the Secretary of State for India, the enclosed statement showing the estimated strength of the Cavalry regiments in India named in the margin.*

*1st Dragoon Guards.
3rd „ „
6th „ „
7th „ „
8th Hussars.
17th Lancers.

As it will be seen that the whole of the regiments named, except the 7th Dragoon Guards, will be completed within 20 of the new establishment by the 31st December, steps are now being taken to promote and appoint the additional officers rendered necessary by the increase.

I am also to inform you that the Commander in Chief in India will be authorised to complete the new establishment of non-commissioned officers, with the exception of the 7th Dragoon Guards. A draft will be sent out to this regiment in February, but the numbers are not yet known.

It is probable that a few more men may be sent out to the other regiments at the same time.

I am, &c.
(signed) *Ralph Thompson.*

The Under Secretary of State for India.

Regiment.	Actual Strength on 1st October 1886.	Draft already Embarked.	Volunteers from 14th Hussars.	Draft to Embark before 31st December 1886.	Total.	Coming Home.		Estimated Strength of Regiment at close of Trooping Season.
						Invalids.	To Reserve, Time-expired &c.	
1st Dragoon Guards -	487	68	3	62	620	6	31	581
3rd „ „ -	485	66	30	87	668	16	42	610
6th „ „ -	514	77	- -	62	653	12	19	622
7th „ „ -	467	52	13	- -	532	24	75	-
8th Hussars - -	508	65	13	52	638	20	28	590
17th Lancers - -	521	85	5	51	662	6	24	632

The new Establishment is 600 all ranks.

War Office, 13 November 1886.

— No. 84. —

(M. 11,503.)

Letter from the India Office to the War Office.

Sir, India Office, 4 December 1886.

I am directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of the 13th November, 20—India—43, and to acquaint you, in reply, that Viscount Cross consents to the promotions and to the appointment of additional officers to the regiments named by you, with the exception of the 7th Dragoon Guards, on the understanding that the additional numbers of privates required to complete some of the regiments are dispatched during the remainder of the trooping season.

I have, &c.
(signed) *J. H. Mayo,*
Assistant Military Secretary.

The Under Secretary of State for War.

— No. 85. —

(Military, No. 357.)

DESPATCH from the Secretary of State for India to the Governor General of India in Council.

My Lord, India Office, 9 December 1886.

IN continuation of paragraph 2 of Military Despatch, No. 256, of the 23rd September last, I forward herewith a copy of correspondence* with the War Office on the subject of the completion of the new establishment of regiments of British Cavalry serving in India. (M. 11,503.)

* From War Office, 20th October, and Enclosure.
To, 28th October, M. 10,686
From, 13th November, and Enclosure.
To, 4th December, M. 11,503.

I have, &c.
(signed) *Cross.*

(For the correspondence referred to in above Despatch, *see* pages 130-2.)

— No. 86. —

(Military, No. 359.)

DESPATCH from the Secretary of State for India to the Governor General of India in Council.

My Lord, India Office, 9 December 1886.

WITH reference to your Despatch dated 5th January 1886, No. 4, and the telegrams noted in the margin,* I transmit, for your information, copy of correspondence† with the War Office relative to the postponement, until the trooping season of 1887-88, of the dispatch of the six batteries of garrison artillery and the drafts to complete the Infantry reinforcements which were to have proceeded to India during the present trooping season.

* From Viceroy, 17th April 1886.
To ditto, 11th May 1886.
From ditto, 12th May 1886.
From ditto, 24th September 1886.
To ditto, 25th September 1886.

† To War Office, 15th May 1886, M. 4584.
From ditto, 31st July 1886, M. 7409.

I have, &c.
(signed) *Cross.*

(For the correspondence referred to in above Despatch, *see* pages 103-4.

— No. 87. —

EXTRACT of a LETTER from the Government of India, No. 194, dated 14th December 1886.

Para. 12. CORRESPONDENCE showing that on the recommendation of the Commander in Chief, it has been decided that the four native mountain batteries of the Punjab Frontier Force shall be linked together under conditions similar to those laid down in Clause 170, India Army Circulars, dated 31st October 1886, for battalions of Native Infantry.

From Adjutant-General in India, No. 56—1-C dated 15th November 1886, and Enclosure.
To Adjutant General in India, No. 927-C., dated 25th November 1886.
From Adjutant General in India, No. 167—1-C, dated 29th November 1886.
Special India Army Circular, dated 1st December 1886.

Enclosures in No. 87.

Artillery.—Organisation.

No. 56—1-C., "Royal Artillery in India, Organisation," dated Headquarters, Calcutta, 15th November 1886.

From Colonel *M. Elliot*, R.A., Deputy Adjutant General, for Adjutant General in India, to Colonel *E. H. H. Collen*, Officiating Secretary to the Government of India, Military Department, Calcutta.

I AM directed by the Commander in Chief in India to forward, for the consideration of Government, the enclosed letter from the General Officer Commanding Punjab Frontier Force, recommending that the four native mountain batteries of that force should be linked together under conditions similar to those laid down in Special Indian Army Circular, dated 13th October 1886, for battalions of native infantry.

2. As very great difficulty has been experienced in keeping the Hazara Mountain Battery up to its strength on service in Burma, his Excellency is most desirous, in order to prevent any similar occurrence in future, that early sanction should be accorded to this proposal, and that, after the 30th instant, all enlistments should be for the artillery of the Punjab Frontier Force generally, instead of for a particular battery as at present.

No. 745, "Organisation," dated Abbottabad, 4th November 1886.

From Brigadier-General *J. W. M'Queen*, C.B., A.D.C., Commandant, Punjab Frontier Force, to the Deputy Adjutant-General, Royal Artillery in India.

WITH reference to Special India Army Circular, dated 13th October 1886, introducing a system of linking native infantry regiments together, in order that in time of war battalions in the field may have their ranks filled with trained soldiers, I have the honour to address you on the great advantage there would be in introducing a similar system in respect to the four mountain batteries of the Punjab Frontier Force.

2. It will be within your recollection that very great difficulty has been experienced in keeping in an efficient state No. 4 Hazara Mountain Battery, now on field service in Burma. This has been owing to there being no system in operation under which the casualties in men and animals, inseparable from field service, could be efficiently replaced, and it is in view of avoiding any similar difficulty in future that I now address you.

3. I would recommend that the four mountain batteries of this force should be linked together, and as it is improbable that all four would be detailed for field service at the same time, the battery or batteries left in cantonments would supply trained men and mules to fill all casualties that occurred in the batteries in the field, replacing by enlistment and purchase the men and mules so transferred.

4. Should my suggestion meet with his Excellency's approval, I would recommend that all gunners and drivers enlisted in any of the four* mountain batteries of this force after the 30th November 1886 be liable to transfer to the other batteries in case of war, it being explained to the men on enlistment that this liability to transfer would come into force only in time of war, and that in peace time a man would remain with the battery in which he originally enlisted.

*No. 1 Kohat Mountain Battery
No. 2 Derajat " "
No. 3 Peshawar " "
No. 4 Hazara " "

No. 927-C., "Artillery, Organisation," dated Fort William, 25th November 1886.

From Colonel *E. H. H. Collen*, Officiating Secretary to the Government of India, Military Department, to the Adjutant-General in India.

I AM to acknowledge the receipt of your letter, No. 56—1-C., Royal Artillery in India, Organisation, dated the 15th November 1886, requesting sanction to a proposal by the General Officer Commanding the Punjab Frontier Force that the four native mountain batteries of that force should be linked together under conditions similar to those laid down in Special India Army Circular, dated 13th October 1886, for battalions of native infantry, so as to provide that after the 30th November 1886 all enlistments shall be for the artillery of the force generally, and not for a particular battery as at present.

2. In reply I am to say, for the information of the Commander in Chief, that the Government of India approve of the proposed arrangement, which it is considered should have effect from 15th December 1886, it being clearly understood that the change is prospective only, and is not to apply to men enlisted before that date. A draft of an Indian Army Circular, which it is proposed to issue notifying the change, is sent herewith for his Excellency's concurrence.

No. 167—1-C., " Royal Artillery in India, Organisation," dated Headquarters, Calcutta, 29th November 1886.

From Colonel *M. Elliot* R.A., for Adjutant-General in India, to Lieutenant-Colonel *E. H. H. Collen*, Officiating Secretary to the Government of India, Military Department.

I AM directed to state that the Commander in Chief in India approves of the publication of the draft India Army Circular on the subject of future recruiting for the artillery of the Punjab Frontier Force, submitted for his Excellency's concurrence with Military Department Letter, No. 927-C.. " Artillery, Organisation," of the 25th instant.

SPECIAL ARMY CIRCULAR.

Government of India.—Military Department.—Fort William, 1st December 1886.

ARTILLERY.—ORGANISATION.

CHANGE in the Conditions of Service of Men of the Four Native Mountain Batteries of the Punjab Frontier Force.

THE Governor-General in Council notifies that the four native mountain batteries of the Punjab Frontier Force will be linked together, and all enlistments in any of these batteries, after the 15th December 1886, will be made for the whole four; that is to say, a recruit enlisted for one battery will be liable to serve in any of the other three, and will be transferred thereto if required in case of war. Beyond this liability to transfer during war to any of the four batteries, the conditions of enlistment will remain as at present.

2. Men enlisted prior to 15th December 1886 do not come within the provisions of this circular.

— No. 88. —

EXTRACT of a LETTER from the Government of India, No. 194, dated 14th December 1886.

Military Department Letters Nos. 653-B. to 656-B., dated 25th August 1885.
To Controller of Military Accounts, Bengal, No. 687 B., dated 29th August 1885.
From Government of Punjab, No. 521-S.-C., dated 17th September 1885.
From Controller of Military Accounts, Bengal, No. 10,018, dated 19th September 1885.
To Adjutant-General in India, No. 959-B., dated 20th October 1885.
From Government of Bombay, No. 5484, dated 20th October 1885.
From Adjutant-General in India, No. 3756-B., dated 29th October 1885.
From Adjutant-General in India, No. 3757-B., dated 29th October 1885.
To Adjutant-General in India, No. 1085-B., dated 2nd November 1885.
From Adjutant General in India, No. 3903-B., dated 9th November 1885.
From Adjutant-General in India, No. 4064-B., dated 20th November 1885.
To Adjutant-General in India, No. 478-B., dated 10th December 1885.
From Government of Madras, No. 7103, dated 14th December 1885, and enclosures.
From Adjutant-General in India, No. 552-C., dated 26th December 1885, and enclosures.
To Adjutant-General in India, No. 316-B , dated 25th February 1886.
To Adjutant-General in India, No. 317-B., dated 25th February 1886.
From Adjutant-General in India, No. 2387-C., dated 5th March 1886.
To Adjutant-General in India, No. 1413-B , dated 2nd October 1886.
From Adjutant-General in India, No. 4465-B., dated 11th October 1886.
Special India Army Circular, dated 13th October 1886.
To Adjutant-General in India, No. 1480-B., dated 14th October 1886.
To Governments of Madras and Bombay, No. 1496-B., dated 16th October 1886.
From Government of Bombay, No. 188-P., dated 1st November 1886.
Special India Army Circular, dated 23rd November 1886.

Para. 13. CORRESPONDENCE regarding the formation of reserves and the linking of the battalions of the Native armies in India. [This has reference to p. 19 of the Secretary of State's Despatch, 29th August 1885, No. 275.]

Enclosure in No. 89.

ORGANISATION.—NATIVE ARMY.

No. 653-B., Organisation, Native Army, dated Simla, 25th August 1885.

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Adjutant General in India.

THE Commander in Chief is aware that the Government of India have recommended to the Secretary of State the formation of a reserve on the lines proposed in your letter, No. 2009-B., dated the 3rd July, and also the reorganisation of the Native Infantry of the Indian Army in linked regiments of three battalions each. Her Majesty's Government have already sanctioned the formation of a reserve, and, pending a reply to the proposals regarding the linking of battalions, I am now to forward, for the opinion of his Excellency, the draft of a General Order which it is proposed to issue as soon as sanction is received to the proposal for linked battalions, with which measure the scheme for a reserve is intimately connected.

2. It would be a necessary part of the new system that the selection of battalions for foreign service should be equally distributed over the different regiments; that is to say, in a general way each three-battalion regiment should furnish one battalion for foreign service before any other regiment is called upon to furnish two battalions. The system assumes also that no regiment shall ever furnish more than two battalions for foreign service, one battalion at least remaining in India as a depôt. It further appears to the Government of India very desirable that a roster for foreign service should be established similar to that which obtains in the British Army. The observance of a fixed order of duty of this sort appears to the Governor General in Council a necessary condition for maintaining a proper degree of military spirit and *esprit de corps* in both officers and men; the Army should feel that all parts of it have an equal chance of achieving distinction, and in this view the selection of regiments for foreign service should be determined by the roster. I am now to suggest that in this view a roster may be laid down for the Bengal Army, which might be either one for all regiments, or separate for the Punjabi and Hindustani regiments, as Sir Donald Stewart thinks best. The Punjab Frontier Force might properly be included, if his Excellency sees no objection.

3. The pioneer battalions will be on an exceptional footing, as also will be the Goorkha regiments. In the present instance the Goorkha regiments will remain as five existing single-battalion regiments, double-battalion being added to each in turn as recruits are available, according to the plan laid down in Military Department letter, No. 169 M.-R., of the 31st March last.

4. I am to forward, for the information of his Excellency, copies of letters which have just been addressed to the Governments of Madras, Bombay, and Punjab on this subject.

DRAFT GENERAL ORDER.

Military Department.—Simla, the August 1885.

No. , ORGANISATION.—NATIVE ARMY.

THE Governor General in Council directs the promulgation of the following regulations, which have been sanctioned by Her Majesty's Government, for the organisation of the Native Armies of India into linked battalions, and the formation of reserves, and has much satisfaction in notifying at the same time the grant to them of the advantages in pay, pension, and travelling allowances herein accorded:—

*Formation of Linked Battalions.**

2. The existing regiments of Native Infantry of India will be grouped into larger regiments of three linked battalions from the present regiments, and to each regiment will be allotted a territorial headquarter station as follows:—

Bengal Army.

Regiment.	Stations.	Regiment.	Stations.
1st, 2nd, 3rd - - -	Meerut.	39th, 40th - - -	Dinapore.
4th, 5th, 6th - - -	Cawnpore.	19th, 22nd, 24th - -	Jhelum.
7th, 8th, 9th - - -	Lucknow.	25th, 27th, 28th - -	Umballa.
10th, 11th, 12th - - -	Fyzabad.	29th, 30th, 31st - -	Sialkot.
13th, 16th, 17th - - -	Allahabad	20th, 21st, 26th - -	Rawal Pindi.
14th, 15th, 45th - - -	—	35th, 36th, 37th -	Jullundur.
18th, 33rd, 38th - - -	Benares.	23rd, 32nd, 34th -	Lahore.

A second battalion will be added hereafter to each Goorkha regiment.

Punjab Frontier Force.

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Madras Army.

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Bombay Army.

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3. The regulation for the formation of regiments of linked battalions will be prospective as regards the soldier.

4. In future a recruit will be enlisted for service in any one of the linked battalions forming the regiment, and he will be liable for transfer to any of the battalions of which his regiment is composed. Beyond this liability to transfer to a linked battalion, the conditions of the sepoy's service will remain just as at present.

5. One of the linked battalions will ordinarily be quartered at the regimental headquarter station, and will form the depôt there when one or two of the other battalions of the regiment take the field.

6. When a battalion is detailed for field service, it will be made up at once to 1,000 effective rank and file by calling in the active reserve, or by drafts from the linked battalion at the headquarter station, or from both.

7. Casualties on service will be filled by transfers of trained men from the battalions left behind.

FORMATION OF RESERVES.

Bengal.

8. Each regiment of infantry will have an active reserve of 218 men, composed of men under 12 years' service, who, after three years' service with the colours, volunteer for transfer to the reserve.

9. Only

* Will not be entered if not sanctioned.

9. Only men physically fit and approved by their commanding officer will be permitted to join the reserve, and the nomination will be made by length of service, the seniors having the prior claim.

10. No men are to be passed into the reserve if the regiment is more than 10 per cent. below its established strength, including recruits.

11. Suitable men already discharged may be taken into the active reserve, if considered fitted for it by their commanding officer. If pensioners, their pensions will lapse; if discharged, with gratuity, the amount so received must be refunded to enable them to count their past service for pension.

12. All men of the active reserve will be liable for field service with any of the linked battalions of their regiment.

13. A garrison reserve will be formed—(1) of men physically fit for garrison duty of between 20 and 30 years' service, who take their discharge; and (2) all men of the active reserve who, on completing a total colour and reserve service of 21 years, will be passed into the garrison reserve, if physically fit for garrison duty.

14. This garrison reserve will be unlimited in number; but no man who has completed 32 years' total service since enlistment, and no man who is not in all respects fit for garrison duty, will be retained in it.

15. The men of this garrison reserve will not be liable to be called out on service beyond the frontier out of India, but only for garrison duty in the country.

16. Men of the reserve, while at their homes, will receive the following rates of pay, viz.:—

	Per Mensem.		
	Rs.	*a.*	*p.*
Sepoys - - - - - - - -	3	8	–
Havildars and naicks - - - - -	4	–	–

17. While embodied for training, or when called out to join their regiments during a war, reserve men will receive the full pay and good-conduct pay they were drawing when they joined the reserve. They will be paid once a year in arrears when called out for training, 10 rupees being paid to each sepoy on first muster, and the balance at the end of the training.

18. The active and garrison reserves will be embodied for training for not less than two months in two years, the period being fixed at such seasons of the year as will best enable the men to be spared from their field work.

19. This training will be carried out at the head-quarter station of the regiment when possible. When this is not practicable, the reserve men will join the nearest battalion of their own, or any other regiment, for training.

20. Free passes by rail, and marching batta, at the rate of two annas per 15 miles, will be given to reserve men going to and returning from the annual training.

21. Two rupees per annum will be paid to each reservist to enable him to keep up at all times, and in an efficient condition, the following articles of uniform, viz.:—

1 puggri,
1 khaki blouse,
1 pair pyjamas,
1 „ putties,
1 „ native shoes,
} Regimental pattern.

22. When called out for service, each man will be supplied by Government with—

1 great coat.
1 havresack.
1 water bottle.

23. During

23. During the annual training reservists will be medically examined, and all men found unfit for garrison duty will be discharged, and will receive gratuities or pensions as follows:—

24. The following gratuities will be allowed to reservists:—

Men of five years' colour and reserve service, but less than 10 years' colour and reserve service - - - - - - - -	3	months' pay of rank and good-conduct pay.
Men of 10 years' colour and reserve service, but less than 15 years' colour and reserve service - - - - - - - -	6	ditto.
Men of 15 years' colour and reserve service, but less than 20 years' colour and reserve service - - - - - - - -	9	ditto.
Men of 20 years' colour and reserve service, but less than 25 years' colour and reserve service - - - - - - - -	12	ditto.

25. A reserve soldier will not be entitled to pension until he has completed 25 years' colour and reserve service.

26. After 25 years' service, partly with the colours and partly in either reserve, he will, if invalided as unfit for garrison service, be granted a modified pension, according to rank (paragraph 40).

27. For every 100 men of the reserve the following non-commissioned officers will be allowed, viz.:—

Four havildars.
Four naicks.

28. If they belong to the active reserve they will be liable to be called out for field service.

29. The records and documents of reservists will be kept at the head-quarters of the battalion to which they belong.

30. The arms and accoutrements of reservists will be kept at the head-quarter station of the regiment, whence they will be forwarded to the place appointed for the annual training of other than the regimental head quarters.

31. The above regulations apply also to the corps of Sappers and Miners, mountain batteries, and to the native cavalry.

32. The reserve for the corps of Sappers and Miners, and the batteries, will consist of 25 per cent. on their established strength.

33. In the cavalry the reserve will consist of 75 dismounted men per regiment.

Gradual Formation of Reserve.

Bengal Army.

34. Each infantry battalion will be recruited to a strength of 980 of all ranks before it commences to pass men into the reserve. When it has reached that strength, the active reserve will be commenced as fast as recruits can be obtained to take the place of men so transferred until the reserve consists of 150 men. When that number has been completed, 68 men will be further transferred to the reserve, and the battalion be reduced to a strength of 912 of all ranks. No more transfers will then take place to the active reserve until a vacancy occurs in the active reserve, either by death, discharge, or transfer to the garrison reserve.

Madras Army.

35. The general regulations for the reserve as given above are applicable to the Native Army of Madras, except as follows:—

The active reserve will consist of 160 men per infantry battalion. This reserve will be formed at once, as fast as recruits can be obtained to take the places of men transferred to the reserve.

Bombay Army.

36. The general regulations for the reserve as given above are applicable to the Native Army of Bombay, except as follows:—

Each infantry battalion will be raised from 832 to 912 of all ranks, and when it has reached the latter strength the formation of the active reserve will be commenced, and 80 men be passed into it, the strength of the battalion being again reduced to 832 of all ranks, which will be its permanent establishment. The reserve will then be further increased to 160 men per battalion, so fast as recruits are available to take the place of men passed into it.

GENERAL REGULATIONS.*

Pensions and Gratuities.

37. The invalid pension now granted to men invalided after 15 years' service is abolished prospectively as regards men enlisting after this date, and the following pensions will be granted in lieu:—

After 21 years' service with the colours an ordinary pension of—

	Rs
Sepoys	4
Drummers, buglers, fifers, trumpeters	4
Trumpet, fife, or bugle-major	7
Havildar, duffadar, and naick after three years' service as such	7
Jemadars after three years' service as such	15
Subadars, ressaldars, and ressaidars after three years' service as such	30

38. All men now serving retain their right to invalid pensions and gratuities as allowed by existing regulations. They are also eligible for the pension now sanctioned after 21 years' service.

39. The present superior rates of pension granted under existing regulations to men of unblemished character after 32 years' total service remain unaltered.

40. The existing pension and gratuity rules for non-combatants are unaltered.

Good-Conduct Pay.

41. The present rates of good-conduct pay are altered as follows, viz.:—

Re. 1 a month after three years' service.
Rs. 2 „ „ six „ „
Rs. 3 „ „ ten „ „

The conditions attached to the grant of this pay remain unaltered.

42. Havildars and naicks will continue to receive good-conduct pay as at present.

Half-Mounting Allowance.

43. Five rupees per annum, instead of four rupees, will be granted in future as half-mounting allowance to every man of the rank and file over 18 months' service.

Furlough.

44. The rules for the grant of furlough to the Native Army will remain as at present; but all men going on and returning from furlough will receive free passes by rail for that part of the road to and from their homes on which they can use the railway.

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* Will not be entered if not sanctioned.

No. 654—B, Organisation,—Native Army, dated Simla, 25th August 1885.

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Secretary to the Government of Madras, Military Department.

THE Government of India have lately received the sanction of Her Majesty's Government for the formation of a reserve to the infantry of the Native Army.

2. It has also been proposed to introduce a system of regiments of linked battalions, each of these larger regiments to consist of three of the existing battalions.

3. A leading object of this arrangement is to furnish reinforcements to a battalion serving in the field. The system would be prospective only as regards the men, that is to say, sepoys now in the army will continue to be liable for service only in their present regiments; but all men enlisted hereafter, although ordinarily serving with a particular battalion, would be liable to transfer, either temporarily or permanently, to either of the other two battalions of the regiment. Further, men going to the reserve will be liable to be attached, when called up, to any of the three battalions of a regiment.

4. The Madras Infantry comprises 32 battalions, two of which are pioneers; these latter might be formed into one regiment of two battalions, the remaining 30 battalions being formed into ten regiments of three battalions each. I am to ask that the Government of Madras will please to propose a distribution of these regiments accordingly for embodiment in a General Order, which it is proposed to publish as soon as the approval of Her Majesty's Government is signified to certain points in the measure which have been referred for further orders.

5. This new system, combined with that of the reserve, renders it desirable that each of the ten regiments of the Madras Army should be given, as far as possible, a territorial character, that is to say, that each regiment should be associated with some particular part of the country, a military station in which should be designated its head-quarters, at which one of the three battalions of the regiment would ordinarily be stationed. The new system further assumes that the battalions to be employed on active service should be furnished equally from the different regiments, that is, that each of the ten regiments should furnish one battalion for foreign or active service before any regiment is called upon to furnish two battalions; and further, that no regiment will ever furnish more than two battalions for foreign service, the third battalion always remaining at territorial head-quarters as a depôt and feeder.

6. The pioneer regiments would be on a special footing as regards the roster and reliefs; and, in the event of both battalions going on foreign service, a joint depôt for the two would be formed under existing rules, but double the usual strength.

7. In connection with the new system, it is also very desirable to establish in a recognised and methodical way a system of rosters for foreign service. I am to ask accordingly that the Government of Madras may be pleased to furnish a list of the order in which the ten regiments it is now to be composed of are to be told off for foreign service.

8. Upon this point I am to observe that the 8th and 20th Regiments, which are now being got ready for service at Suakin, would naturally be regarded as first on the roster. The 23rd and 24th Regiments have been warned for the 1st Army Corps, and the 27th for the Reserve Division; so that if the Government of Madras desire that this order be maintained, these regiments must be considered as next for foreign service.

9. It may be observed that these five battalions must necessarily be attached to five separate regiments on the new organisation, or if it is desired that any of them should belong to the same regiment, then some other battalions would have to be substituted for them in the present order of relief.

10. The rules for the formation and constitution of a reserve accompany. The strength of reserves fixed for each battalion of the Madras Army is 160, and I am to say that the Government of Madras will be authorised, as soon as the General Order is published, to at once pass men into the reserve to that extent, as fast as recruits are obtained to take their place.

11. It will be noticed that men are eligible to enter the reserve after only three years' service; but preference should be given to older soldiers in the first instance, and only men of such short service passed into the reserve, if this is found necessary to complete the number.

12. It will be for the consideration of the Madras Government whether the reservists, when called out for training, should be attached to the battalion at their regimental head-quarters or to some other battalion nearer to their homes. Possibly, in the first instance, the latter arrangement may be found the more convenient; but eventually, if recruiting assumes a more territorial character, it should be practicable always to attach the reserve men to a battalion of their own regiment.

13. It is not proposed, at any rate at present, to alter the numbers of existing battalions, but it may perhaps be found convenient to designate each group of linked battalions by a territorial designation.

14. I am to ask that the Government of Madras, in reply to this letter, will be so good as to favour the Government of India with any suggestions which may appear to them calculated to conduce to the success of this important measure.

No. 655—B., Organisation—Native Army, dated Simla, 25th August 1885.

From Major General *C. Chesney*, Secretary to the Government, India, Military Department, to the Secretary to the Government of Bombay, Military Department.

THE Government of India have lately received the sanction of Her Majesty's Government for the formation of a reserve to the infantry of the Native Army.

2. It has also been proposed to introduce a system of regiments of linked battalions, each of these larger regiments to consist of three of the existing battalions.

3. The Government of Bombay have already in 1882 proposed the introduction of this system for their army, and the proposal was lately renewed in your letter, No. 3752, dated 6th July 1885. I am now to say that if the Government of Bombay adhere to that distribution, it may be at once carried out on the general arrangement, receiving the sanction of the Secretary of State, which has been applied for. The system would be prospective only as regards the men, that is, sepoys now in the army will continue to be liable for service only in their present regiments; but all men enlisted hereafter, although ordinarily serving with a particular battalion, would be liable to transfer, either temporarily or permanently, to either of the other two battalions of the regiment. Further, men going to the reserve will be liable to be attached, when called up, to any of the three battalions of a regiment.

4. The Bombay Infantry, comprising 26 battalions, would thus be formed into eight regiments of three battalions each, with two regiments of one battalion, one of these, the 21st, being the Marine battalion. I am to say that if the Bombay Government approves of the proposal, these two single-battalion regiments, or any others to be selected for the purpose, might be made pioneer battalions. The Madras Army has two pioneer battalions, so also has the Punjab portion of the Bengal Army, and it is in contemplation to convert two battalions of Hindustanis into pioneers; it seems desirable that the Bombay Army also should contain a proportion of this useful arm.

5. This new system, combined with that of the reserve, renders it desirable that each of the eight regiments of the Bombay Army should be given, as far as possible, a territorial character, that is, that each regiment should be associated with some particular part of the country, a military station in which should be designated its head quarters, at which one of the three battalions of the regiment would ordinarily be stationed. The new system further assumes that the battalions to be employed on active service should be furnished equally from the different regiments, that is, that each of the eight regiments should furnish one battalion for foreign or active service before any regiment is called upon to furnish two battalions; and further, that no regiment will ever furnish more than two battalions for foreign service, the third battalion always remaining at territorial head quarters as a depôt and feeder.

6. The pioneer regiments, should the Bombay Government decide to propose their formation, and the proposal be approved by Her Majesty's Government, would be on a special footing as regards the roster and reliefs; and in the event of both battalions going on foreign service, a joint depôt for the two would be formed under existing rules, but double the usual strength.

7. In connection with the new system, it is also very desirable to establish in a recognised and methodical way a system of roster for foreign service. I am to ask accordingly that the Government of Bombay may be pleased to furnish a list of the order in which the eight regiments it is now to be composed of are to be told off for foreign service.

8. Upon this point I am to observe that the 28th Regiment, which is now about to return from Suakim, will naturally be placed last on the roster, and the 16th Regiment, which is now under orders to go there, will stand first on the list. Next to them will come the 9th and 23rd Regiments, which have been warned for duty with the 1st Army Corps, the 29th Regiment for the 2nd Army Corps, and the 27th and 30th for the Reserve Division, if the Government of Bombay desire this order to be maintained.

9. It may be observed that these six battalions must necessarily be attached to six separate regiments on the new organisation, or, if it is desired that any of the battalions should belong to the same regiment, then some other battalions would have to be substituted for them in the present order of being warned for duty.

10. The

10. The rules for the formation and constitution of a reserve accompany. The strength of reserves fixed for each battalion of the Bombay army is 160, the existing strength of the regiments being first raised from 832 to 912; and I am to say that the Government of Bombay will be authorised, as soon as the General Order is published, which is now under preparation, to pass 80 men into the reserve upon the battalions respectively being recruited up to 912, thus bringing the active establishment down again to the normal strength of 832, and thereafter to complete the reserve of the battalion to 160 so fast as recruits are obtained to take the place of the reserve men.

It will be noticed that men are eligible to enter the reserve after only three years' service; but preference should be given to older soldiers in the first instance, and only men of such short service passed into the reserve, if this is found necessary to complete the number.

12. It will be for the consideration of the Bombay Government whether the reservists, when called out for training, should be attached to the battalion at their regimental headquarters, or to some other battalion nearer to their homes. Possibly, in the first instance, the latter arrangement may be found the more convenient; but, eventually, if recruiting assumes a more territorial character, it should be practicable always to attach the reserve men to a battalion of their own regiment.

13. It is not proposed, at any rate at present, to alter the numbers of existing battalions, but it may, perhaps, be found convenient to designate each group of linked battalions by a territorial designation.

14. I am to ask that the Government of Bombay, in replying to this letter, will be so good as to favour the Government of India with any suggestions which may appear to them calculated to conduce to the success of this important measure.

No. 656-B., Organisation—Native Army, dated Simla, 25th August 1885.

From Major General *G. Chesney*, Secretary to the Government of India, Military Department, to the Secretary to the Government of the Punjab, Military Department.

I AM directed to inform you, for the information of the Lieutenant Governor, that the Government of India have proposed to the Secretary of State that the existing regiments of infantry of the Indian army should be grouped into larger regiments of three battalions each. The object of this measure is to admit of reinforcing the battalions on service from those left in quarters, it being understood that not more than two of the linked battalions of a regiment would ever go on service at the same time, one at least remaining as a depôt.

2. Omitting the 5th Goorkha Regiment and the Guides Infantry, whose organisation would not be disturbed, there are nine regiments of infantry in the Punjab Frontier Force. I am desired to ask that, under the orders of the Lieutenant Governor, a proposal for grouping these into regiments of three battalions each may now be furnished.

3. It would be understood that this change, if sanctioned, would be prospective only, that is to say, every sepoy enlisted hereafter will be liable for transfer, either permanently or temporarily, to any of the three battalions composing the regiment.

4. I am to ask that the Government of India may be favoured with any suggestions which may be called for in view to carrying out this change as regards the class composition of the different regiments, or any other point.

No. 687-B., Organisation, dated Simla, 29th August 1885.

From Colonel *A. Crookshank*, Deputy Secretary to the Government of India, Military Department, to the Controller of Military Accounts, Bengal.

I AM directed to forward herewith, for review by you and any officers of your Department you may select, a rough draft of rules which have been proposed for the formation of reserves for the Native army, and to request that you will communicate as early as possible any additions or emendations which may appear to you to be desirable in view to the rules being made full and complete in every respect.

2. Your opinion and suggestions are invited particularly with regard to the registration of addresses, the payment of reserve pay, should it be thought desirable to pay the men half-yearly instead of yearly on embodiment, the grant and rate of gratuities, and the rate of modified pensions after 25 years' service.

No. 521-S-C., dated Simla, 17th September 1885.

From the Secretary to the Government of the Punjab, Military Department, to Colonel *O. R, Newmarch*, Officiating Secretary to the Government of India, Military Department.

I AM desired to forward, in reply to your letter No. 656-B., dated the 25th August 1885, copy of a letter from the General Officer Commanding Punjab Frontier Force, submitting a proposal for grouping the nine infantry regiments of the force into regiments of three battalions.

2. I am to state that the Lieutenant Governor has no suggestions to make at present on the subject of paragraph 4 of your letter.

No. 427-B., dated 8th September 1885.

From the Brigadier General Commanding Punjab Frontier Force to the Secretary to the Government of the Punjab, Military Department.

I HAVE the honour to acknowledge receipt of your No. 1372, dated 21st August 1885, forwarding copy of Government of India, Military Department, letter No. 656-B., Organisation—Native Army, dated the 20th idem, intimating that it is contemplated to group the existing regiments of infantry of the Indian Army into larger regiments of three battalions each, and calling for proposals regarding the grouping of the nine regiments of infantry, omitting the 5th Goorkha Regiment and the Guide Infantry, of the Punjab Frontier Force.

2. In reply, I have the honour to suggest the following grouping of the nine regiments referred to :—

Grouped as Regiments.		COMPANIES.									
		Punjab Mahomedans.	Trans-Indus Mahomedans.		Hindustani.		Sikhs.	Dogras.	Religious Element.		Total.
			Within the Border.	Afridis.	Mahomedans.	Hindus.			Mahomedans.	Hindus.	
1st Sikh	1st Sikhs	1	2	–	–	–	4	1	3	5	8
	3rd „	1	2	–	–	–	4	1	3	5	8
	4th „	2	1	–	–	–	4	1	3	5	8
1st Punjab Infantry.	1st Punjab Infantry	2	1	1	–	–	2	2	4	4	8
	4th „ „	2	1	1	–	–	2	2	4	4	8
	5th „ „	1	2	1	–	–	3	1	4	4	8
2nd Punjab Infantry.	2nd Sikhs	2	1	–	–	–	2	3	3	5	8
	2nd Punjab Infantry	3	1	–	–	–	3	1	4	4	8
	6th „ „	1	3	–	–	1	2	1	4	4	8
	Total Companies	15	14	3	–	1	26	13	32	40	72

3. The constitution of the regiments as above detailed is according to the standing orders of the force, and where in fact it differs in detail it is gradually conforming to orders.

No. 10,018, dated Calcutta, 19th September 1885.

From Colonel *M. C. Perreau*, Controller of Military Accounts, Bengal, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, Simla.

I HAVE the honour to acknowledge the receipt of your letter, No. 687-B., of the 29th August 1885, forwarding a draft of rules proposed for the formation of reserves for the Native Army, and requesting suggestions as to any additions or emendations which may appear desirable. The question is of much importance, and one which would require considerable time and inquiry before any practical suggestions could be made with confidence.

2. I placed the rules before the officers of this department named in the margin, and have now the honour to offer the following brief remarks on the points specially noticed.

Major Thomas.
„ Woodstock.
Captain Burgess.

1st.—Registration of address.
2nd.—Payment of reserve pay.
3rd.—Grant and rate of gratuities.

Registration of Address.—Some such form as that on the first page of Bengal Form A-R, No. 12, would appear to be well suited for the purpose of affording all the information required, and a register in such form should be kept at the head-quarter station of each regiment, containing the names of the recruits alphabetically arranged, each district in which the men may reside being separately grouped.

Copies of the registers should be lodged with the civil authorities of the several districts, in view to aiding them in calling out the reserves as occasion demands.

Mode of Payment.—Payment should be made at regimental head-quarters yearly in arrears.

Neither the agency of the civil authorities nor of the deputy paymasters of pension circles is advocated. It is well understood that native pensioners much prefer being dealt with by military officers, and payment by deputy paymasters is deprecated, as these officers have quite enough to do, if their legitimate duties are properly attended to. The roll of pensioners is already very large, and the reservists should be kept quite distinct. Half-yearly payments are therefore not approved of. By being paid yearly in arrears. the men will have all the greater inducement to attend at regimental head-quarters.

Gratuities.—The rates proposed appear fair, and commend themselves when compared with those in Article 35, Indian Army Regulations, Vol. I., Part II. It is thought that para. 4 of the printed rules will require reconsideration. A sepoy in receipt of 4 rupees per mensem, ordinary rate of pension, may require better terms than those offered to induce him to waive the right to pension to which he has attained. As the scheme develops, so will details requiring consideration and adjustment be brought to light, and it will probably be found necessary to have the whole reserve force placed under a body of officers responsible for the maintenance of the force in a state of thorough efficiency.

No. 959-B., Organisation—Native Army, dated Simla, 20th October 1885.

From Colonel *A. Crookshank*, Deputy Secretary to the Government of India, Military Department, to the Adjutant General in India.

IN continuation of Military Department, No. 621-B., dated the 18th August last, forwarding a copy of a Despatch from the Governor General in Council to the Secretary of State, No. 135, dated the 14th idem, I am directed to transmit herewith, for the information of the Commander in Chief, an extract of a telegram from the Secretary of State, dated the 14th instant, sanctioning the formation of reserves for the Native Army, and to request that, under his Excellency's orders, the Government of India may be furnished at an early date with a report on the rules for the formation of these reserves.

EXTRACT from the Proceedings of the Government of Bombay, Military Department, No. 5484, Army—Native Organisation—Formation of Reserve and Introduction of system of Linked Battalions; dated Bombay Castle, 20th October 1885.

Letter from the Adjutant General, No. C-35-5—10,270; dated 6th October 1885.

"With reference to Government Resolution, No. 4968, dated the 17th September, I am directed by the Commander in Chief to state that his Excellency is most anxious to give effect to the proposals of the Government of India embodied in Secretary Colonel Chesney's letter, No. 655-B., dated 25th August 1885, in every detail in which these agree with the internal conditions of this Army.

"2. The grouping of three battalions into one homogeneous regiment as already worked out is perfectly simple, leaving regiments very nearly as they stood before in the Army List without incorporating the 21st and 28th Regiments of Bombay Infantry.

"3. These last thus present themselves for the two pioneer battalions intended to reinforce the efficiency of a Bombay Contingent in the field.

"4. But the 21st Bombay Infantry is a special regiment, finding detachments for the Persian Gulf, and from time to time performing Marine duties, for which it maintains a seaboard recruitment.

"5. The Government of India would probably not wish to disturb its present useful *status*, the more so as its headquarters at Bombay would certainly not assist pioneer enlistment.

"6. The Commander in Chief would propose to sever the Marine Battalion altogether from the Bombay Army and place it as a separate corps under the orders of the Government of India. Its special duties render it absolutely impossible to move it from Bombay, and its utility as a fighting battalion is therefore *nil*. At the present moment 286 men of this battalion are on detachment in Persia and Arabia, and a certain quota are employed on duty in the ironclads which guard Bombay Harbour. Moreover, as it has been decided to increase the defences of Bombay and Karachi, it is probable that more men will be required for harbour duties, and for this and the Persian detachments the Marine Battalion would, from its constitution, be admirably suited and always available. To replace the Marine Battalion, his Excellency would recommend that one of the disbanded infantry regiments of the Bombay Army should be restored, and this battalion with the 28th Bombay Infantry would supply the two pioneer regiments required. An attempt might be made to raise this new battalion amongst the Mangs and Ramosees, a class containing excellent material, but whom it has hitherto been found difficult to attract to military service, making Ahmednagar, which is near the district they inhabit, the territorial centre for the regiment.

"7. Should this plan, however, not meet with the approval of the Government of India, the Commander in Chief would propose to utilise the Mhairwara Battalion local to Ajmere. His Excellency lately inspected this corps, and, from its activity, its high training in musketry, and its good physique, formed a very high opinion of its suitability for the work of a pioneer battalion on service. The men composing it are very enduring, but of a class that decline service in the regular Army in time of peace, but most willing and anxious to serve in time of war. As pioneer companies are always split up, the 10 companies of the Mhairwara Battalion would be sufficient, six companies being always available for field service. It is but only fair to remark that the Governor General's Agent in Rajputana does not approve of the suggestion, considering that the transfer would be unpopular with the men, and that any alteration in the terms of service had been strongly deprecated by Colonel Keatinge (at one time Governor General's Agent in Rajputana). As this was 15 years' ago, and a change may have come over the minds of the men, it might be considered advisable to ascertain their feelings on the subject, if Government consider the proposal otherwise worthy of consideration.

"8. As a third alternative towards the provision of pioneers, pioneer companies might be raised at the territorial centres of each regiment, thus giving eight companies of pioneers capable of amalgamation when required.

"9. In grouping the existing battalions into regiments, it would, the Commander in Chief thinks, be impolitic to upset the natural order, which in the first four of the new regiments preserves a traditional and much-valued character; thus:—

1st Regiment	- - - -	of Grenadiers.
2nd „	- - - -	of Rifles.
3rd „	- - - -	Light Infantry.
4th „	- - - -	Biluch.

So that if the creation of two pioneer regiments be insisted upon in dealing with the remaining thirteen regiments of the line, the three-battalion principle must be sacrificed to this object by placing the eighth regiment on a double-battalion footing.

"10. The

"10. The objection to this prevails even over General Hardinge's strong wish that two pioneer battalions should be a part of the infantry of this command, because his Excellency attaches greater importance to the placing of all regiments upon such equality as will ensure that none shall forfeit (in its most capable representative for the time being) its proper turn of active service on any other grounds than those of self-created disabilities; and this, with regiments uniform in constituents, can be assured, without detriment to public interests, by a strict system of confidential reports and practical inspections.

"11. Moreover, pioneer battalions for effective use in the field should habitually, at drill, carry their burdensome equipment (as is the custom with the 32nd Musbi Sikhs), or at least must have such constant pick and shovel exercise as employment on public works in the Madras Presidency profitably facilitates. The seldom cold climate of Western India renders the former hardly desirable, and without working pay a mere title will little influence the special training which it implies.

"12. Again, a pioneer battalion attached to divisional headquarters on service must so often be broken up into detachments for separate columns that it suffers least from dismemberment for technical duties; and although each quota of a distinct force should be as complete as it can be made, this principle in India can very rarely be carried to its highest standard.

"13. If the Government of India will assent to the Bombay troops remaining, as hitherto, dependent upon Bengal and Madras for their pioneer adjuncts, General Hardinge sees in this the simpler settlement of the question.

"14. The all-important consideration in carrying out the new organisation is to determine where the centres for the eight regiments shall be established, as many of the stations now occupied by Bombay troops are barren of recruits, and even where this is not the case may be found insufficient in their resources for increased demands. The following places seem from present experience to offer the best chance:—

Poona - - - - -	Centre for	1 regiment,
Nasirabad - - - - -	„	2 regiments,
Mhow - - - - -	„	2 „
Satara - - - - -	„	1 regiment,
Ahmednagar - - - -	„	1 „
Sind - - - - -	„	1 „

for the working of which the redistribution scheme proposed by his Excellency in the Quartermaster General's Department will be necessary.

"15. The Commander in Chief has no remarks to offer regarding the proposals for the Reserve as suggested in the letter from the Secretary to the Government of India, which seem to him to meet the case completely; but his Excellency would venture to submit the following supplementary proposals for extending the usefulness of this reserve in reducing the large number of Native civilian followers which at present hamper an Indian army in the field by substituting for them armed and efficient men.

"16. This, General Hardinge thinks, could be accomplished by having battalions in the Reserve trained specially, according to army corps or presidential requirements, as transport drivers, ambulance corps, hospital bearers, &c., &c., and armed, with certain modifications, as soldiers.

"17. The advantages of such a system are obvious. The men would be disciplined and capable of defending themselves and the camp, if necessary, instead of, as at present, being a helpless crowd of undisciplined individuals at the mercy of any one who chooses to attack them. Baggage guards would be reduced to a minimum, and stores, &c., be safe and regular in transit instead of, as at present, irregular and often relieved of half their bulk by the time they reach their destination. Convoys would thus be trained machines, and would move and march with the same precision and regularity as the army itself. The hurry and scurry in procuring followers now attendant on the dispatch of an army to the field would be avoided, and we should instead have at hand a trained body of men with the confidence begotten of comradeship and the self-reliance following on discipline. Officers should have soldier-servants limited according to rank and requirements; for staff and departmental officers they could be taken from the reservists, and for regimental officers from regiments.

"18. General Hardinge would not confine himself to manning these battalions from the reservists, but would draft volunteers from the regular army into them as soon as they had been well trained in the use of arms, say after one or two years' service. From the very fact of their being to a great extent localised, service in these battalions would be most popular.

"19. Such a system as that roughly sketched above would, General Hardinge thinks, be quite practicable, and once well established would be easily expansible, if necessary, from the civil population. One campaign in ten years would make it self-supporting in the saving effected in transport animals and commissariat stores in transit.

 "20. The

"20. The present arrangement, which can hardly be dignified by the name of system, is a relic of times which have long since gone by; and although it might be said that it has answered well up to now, albeit at an enormous cost and sacrifice in men, money, and animals, it can scarcely be maintained that it is suitable to the military efficiency of the present age, the essentials to which are swiftness, precision, and cohesion, combined with flexibility.

"21. However strongly the frontier may be fortified in the most approved and scientific manner, the works would prove of doubtful utility, unless combined with mobile armies having an organised system of workers in the immediate zone of operations, such as is provided for every army in Europe; and the Commander in Chief considers the present a very favourable opportunity for establishing such a system to the greater efficiency of the army and eventual benefit to the finances of the State."

RESOLUTION.—The proposals made by his Excellency the Commander in Chief in the foregoing letter from the Adjutant General should be submitted to the Government of India for consideration, with reference to their letter No. 655-B., Organisation—Native Army, dated 25th August last.

(signed) *M. W. Willoughby*, Colonel,
Secretary to Government.

The Adjutant General.
The Quartermaster General.

No. 5484.

SUBMITTED to the Government of India for consideration, in accordance with the preceding resolution.

(signed) *M. W. Willoughby*, Colonel,
Secretary to Government.

The Secretary to the Government of India,
Military Department, Simla

No. 3756-B., Native Army—Organisation, dated Headquarters, Simla, 29th October 1885.

From Colonel *H. Collett*, C.B., Deputy Adjutant General, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

I AM instructed to reply as follows to your letters marginally noted:—

(1.) No. 688-B, dated 29th August 1885, forwarding 12 copies of draft rules for the formation of Native Army Reserves.
(2.) No. 842-B., dated 28th September 1885, forwarding a review by the Controller of Military Accounts of the draft rules for the formation of the Native Army Reserves.
(3.) Military Department No. 959 B., dated 20th October 1885, forwarding Secretary of State's telegram authorising formation of Reserves.

2. The draft rules for the formation of the Native Army Reserves have been, under the Commander in Chief's orders, sent for review to Colonel Pennington, Commanding 13th Bengal Lancers; Colonel Chapman, Commanding 8th Bengal Cavalry; Colonel Venour, Commanding 5th Bengal Infantry; and Colonel Beddy, Commanding 29th Punjab Infantry.

3. His Excellency, after a careful consideration of these officers' opinions, has directed the following remarks on the draft rules to be submitted for the consideration of Government:—

(1.) Paragraph 1. All the officers consulted agree in thinking that three years is too short a service to require of men before transfer to the Reserve. His Excellency is disposed to agree with the reasons urged in support of this opinion, and recommends that "five years' service" be substituted in this paragraph for "three years' service."

(2.) Paragraph 3. Ten per cent. is considered too large a proportion to allow a regiment to fall below its complement, especially in the case of cavalry. The Commander in Chief recommends that for cavalry regiments the limit may be fixed at 5 per cent.

(3.) Paragraph 4.

(3.) Paragraph 4. This paragraph appears to require revision. The Controller of Military Accounts, and the officers consulted, point out that a pensioner is not likely to give up his pension to join the reserve; and, moreover, it seems inexpedient to admit into the active reserve men who have been declared physically unfit for further service by a medical committee.

The Commander in Chief recommends that men who have already been discharged on pension should be eligible only for the garrison reserve, if considered fit, and that such men joining the garrison reserve should be granted a suitable increase to their pension, say one-third or one-fourth of its amount.

Short-service men who have been discharged with gratuity should only be admitted to the garrison reserve on refunding the amount of the gratuity they had received; they would then become entitled to their ordinary reserve pay. Very few men would probably be found able to refund their gratuities, and this is not to be regretted, as men of this class would not be very desirable recruits.

Paragraph 6. It should be stated in this paragraph that the men admitted to the garrison reserve should be volunteers and approved by the commanding officer.

Paragraph 7. It seems doubtful whether it is advisable to lay down 32 years as the limit beyond which men will not be retained in the garrison reserve, or indeed whether any age limit is necessary if adequate measures are taken to secure the exclusion of men who are physically unfit. There are many men, especially Native officers and havildars, who are quite fit for garrison duty, and who would be valuable men in a garrison reserve, whose service exceeds 32 years. The Commander in Chief thinks that it will be advisable to omit the age limit, and to make service in the garrison reserve entirely dependent upon bodily fitness for duty.

Paragraph 9. It seems advisable to make a difference between havildars and naicks, and the sepoys' reserve pay is perhaps unnecessarily high. The following modification is suggested:—

	Rs.	*a.*	*p.*
Duffadars and havildars - - - - - -	4	-	-
Lance duffadars and naicks - - - - -	3	8	-
Sowars and sepoys - - - - - - -	3	-	-

It should also be stated that these rates of pay apply to all men of both garrison and active reserve, except pensioners, who are specially provided for.

Paragraph 10. It should be stated in this paragraph that reserve pay lapses while full pay is being drawn. Some rules are also required in this place regarding the punishment of reserve men who absent themselves from, or are negligent in attending, the annual training. The Commander in Chief thinks that the best way will be to make such offences cognisable by a civil magistrate, and punishable by either fine or imprisonment in a civil gaol.

Paragraph 12. It seems necessary to revise the last clause of this paragraph as follows:—

"When this is not practicable, the reserve men will join the nearest battalion of their own or any other regiment in which there may be a company of their own class or nationality."

It is not advisable that Hindus should be required to undergo their annual training in a purely Mahomedan regiment, or *vice versâ*.

Paragraph 14. It has been represented to the Commander in Chief that the sum of two rupees a year is not sufficient to maintain the kit laid down, especially in the case of cavalry soldiers, for whom additional articles would be necessary.

The following kit would be the least that a Sowar would require:—

1 turban.	1 pair putties.
1 kurta.	1 „ ankle boots.
1 kumarbund.	1 sword belt.
1 pair pyjamas.	

Perhaps the best and cheapest way would be to lay down the two kits as above, and for the Government to give a free issue once in three years, the articles being made up regimentally, and the cost recovered in contingent bills.

The following equipment would also be necessary for the annual training of the cavalry reserve:—

1 saddle, bridle, &c., complete.
1 sword.
1 lance (where used).

These articles should be Government property, and be kept in regimental charge.

The supplying of horses for the annual trainiug is rather a difficult matter to deal with; the horses in a Silladar regiment are the men's property, and they could hardly be required to lend them for the reserve men's training without some compensation for their use. It seems necessary that the Government should be prepared to pay the Chunda Fund a suitable compensation on this account.

Paragraph 20. Should read—

4 duffadars or havildars.
4 lance duffadars or naiks.

4. The Commander in Chief also desires to draw the attention of Government to the following points, for which provision seems required:—

I. The addition made by the organisation of the reserves to the numbers borne on the rolls of an infantry regiment will be 218 men of the active reserve and an unlimited number of men in the garrison reserve.

For these men clothing will have to be prepared and issued, arms and ammunition indented for and taken care of, pay drawn and disbursed, arrangements made for accommodation while training, nominal and descriptive rolls prepared, records corrected, civil officers communicated with, and a variety of other business carried out, and details cared for.

Unless the management and organisation of the reserve branches of a regiment are adequately provided for, and placed on a proper footing at starting, the scheme, which ought to prove a valuable adjunct to our military strength, will run a good chance of being a failure.

The Commander in Chief does not consider that the reserve branch of a regiment will be properly worked unless a qualified officer is placed in special charge of it, and unless he is adequately remunerated for his labour, and provided with a sufficient office establishment.

It appears to his Excellency that such an officer should be of the rank of captain; that he should have the same office allowance as an adjutant; and that a havildar, with the staff allowance of a pay havildar, should be appointed to assist him. It seems impossible to work an organisation with less, which will entail a great deal of correspondence with the civil district officers and with the departments of the Army.

II. It seems necessary that civil officers in charge of districts should be supplied with nominal and descriptive rolls of all reserve men; that they should be responsible for the delivery to them of all orders received from the regiment, and for reporting to the regimental authorities the occurrence and date of casualties among reserve men. Reserve men should, on the other hand, be bound, under legal penalties, to keep their district officers informed of their movements and change of address.

P.S.—The question of native officers for the garrison reserve has not been provided for. If it is intended to employ those men as garrisons for posts, &c., without attaching them to regiments, native officers will be necessary.

No. 3757-B., Native Army-Organisation, dated Head Quarters, Simla, 29th October 1885.

From Colonel *H. Collett*, C.B., Deputy Adjutant General, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

I AM directed by the Commander in Chief to reply as follows to your letter, No. 653-B., of 25th August, forwarding for remark a draft General Order notifying the establishment of reserves for the native army:—

Paragraph 2. It is recommended that Ferozepore may be named as the head quarter station for the 14th, 15th, and 45th Sikhs.

Paragraph 3. Last line should read "as regards soldiers now in the service?"

Paragraph 6. Last line should read, "or from both the sister battalions?"

Paragraph 7. Last line should read, "from the sister battalion or battalions not in the field?"

Paragraph 26. The reference in the last line should be to paragraph 37, not to paragraph 40?

2. The remainder of the General Order has been already reported on in this office, No. 3756-B., dated 29th October 1885.

No. 1085-B., dated Fort William, 2nd November 1885.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India.

WITH reference to, and in continuation of, Military Department letters quoted in the margin, I am directed to forward, for the early opinion of his Excellency the Commander in Chief, a draft India Army Circular which it is proposed to issue at an early date, notifying the changes in the conditions of service in the Native armies in India, which have been proposed by the Government of India and sanctioned by Her Majesty's Government.

No. 653-B, dated 25th August 1885.
No. 688-B, dated 29th August 1885.
No. 842-B, dated 28th September 1885.
No. 959-B, dated 20th October 1885.

2. The papers detailed above will place his Excellency in possession of the detailed reasons which have led to the proposed changes of organisation, and I am to ask that, under the orders of the Commander in Chief, the Appendix to the Circular notifying the rules for the formation of reserves may be prepared and submitted for the consideration of the Government of India. In connection with this particular question, I am to invite attention to paragraph 67 of the Despatch No. 135 of 1885. The proposals might be those already sent for his Excellency's opinion with the amendments proposed in your letters Nos. 3756 and 3757, dated 29th October 1885, which would then be considered by Government in a complete form.

3. The Government of India will be glad to receive any additions or amendments to the circular which the Commander in Chief may consider necessary or desirable. The favour of an early reply is requested,

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No. 3903-B., Native Army—Organisation, dated Simla, 9th November 1885.

From Colonel *H. Collett*, C.B., Deputy Adjutant General, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

IN para. 19 of the draft rules for the formation of Native Army reserves, received with Military Department No. 688-B., dated 29th August 1885, it is stated that a man after 35 years' service, partly with the colours and partly in either reserve, will, if invalided, be granted a "modified pension," according to rank.

I am to inquire what this "modified pension" is, as it does not appear to be anywhere laid down.

No. 4064-B., Native Army—Organisation, dated Simla, 20th November 1885.

From Colonel *H. Collett*, C.B., Deputy Adjutant General, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

WITH reference to paragraph 4, clause 1, of this office letter, No. 3756-B, dated the 29th October 1885, and in modification thereof, I am directed to state that the Commander in Chief considers that commanding officers of regiments should be responsible for all records of reserve men which should be kept in the orderly-room, and that such extra clerical assistance as may be required should be given to the adjutant.

No. 478-B., Organisation—Native Army, dated Fort William, 10th December, 1885.

From Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India.

WITH reference to your letters quoted in the margin, I am desired to forward, for the final concurrence of the Commander in Chief, draft rules for the organisation of reserves for the Native Army, and to offer the following remarks thereon for his Excellency's consideration :—

No. 3756-B, dated 29th October 1885.
No. 3757-B, dated 29th October 1885.
No. 3903-B, dated 9th November 1885.
No. 4064-B, dated 20th November 1885.

Para. 4. The Government of India are inclined to doubt the advisability of taking into the active reserve men who have been discharged with or without gratuity.

Para. 6. As the new pension rules give a soldier his pension after 21 years' service, it seems necessary to modify this paragraph.

The opinion of the Commander in Chief is requested on the change proposed, as also on the proposed addition to pensions made by paragraph 9.

Paras. 11 and 12. His Excellency's attention is invited to these paragraphs.

Para. 14. In the opinion of the Government of India it will be better to adhere to the original proposal and to allow the reserve men to keep up their own kit under such regulations as may be laid down regimentally. The preparation and issue of, and payment for, clothing by the regimental authorities would add very considerably to their work.

Para. 18. The opinion of the Commander in Chief is requested on the proposed rates of pension.

Para. 19. This seems to provide sufficiently for the proposal made on para. 10 in your letter, No. 3756-B., dated 29th October 1885.

Para. 22. An office allowance of 30 rupees per mensem is proposed with reference to your letter, No. 4064-B., dated 20th November 1885.

Para. 23. It is thought that if each regiment kept the arms of its active reserve, these would suffice for the training of such number of its active and garrison reserve as would join regimental head-quarters, and also of those men of the reserves of other corps who might be attached for the biennial training under para 12. It seems hardly practicable that each regiment should send down the reserve arms from its head-quarters to the various stations, when the reservists might undergo their training under the above paragraph. But this paragraph can easily be modified hereafter, when the stations at which the bulk of the reservists will undergo their training are known.

Para. 27. I am to ask what allowance the Commander in Chief would propose for the use of the regimental horses.

Postcript to your letter, No. 3756-B., dated 29th October 1885.—It is not considered necessary to have any reserve Native officers for the garrison reserves, as these would be attached for duty to regiments.

2. I am to add that if there is likely to be much delay in replying to this letter, or if there are any important points which his Excellency the Commander in Chief would wish to reserve for further consideration, it would be as well to publish at once the India Army Circular regarding the new conditions of service in the Native Army, forwarded with my No. 1085-B., dated 2nd November 1885, with a remark in paragraph 6, that the rules for the organisation will be notified hereafter. In any case, they will no doubt require considerable modification hereafter after actual experience has brought to light the defects in their working. But it is very desirable that the new conditions of service should be made known to the army at the earliest date.

3. The favour of a very early reply is requested.

No. 7103, dated Fort St. George, 14th December 1885.

From Lieutenant-Colonel *A. Kenney-Herbert*, Secretary to the Government of Madras, Military Department, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

Dated 25th November 1885.

WITH reference to your letter No. 654-B., Organisation—Native Army, dated 25th August 1885, I have the honour to forward letter No. 2848, Native Army—Organisation, from the Adjutant General of the Madras Army, together with a Memorandum by Colonel Faunce, Deputy Adjutant-General, in which the proposals of the Government of India are exhaustively considered from every point of view.

2. With reference to this subject, I am directed to state that the Government of Madras have nothing to urge against the introduction of the linked battalion system. The measure can apparently be carried out without affecting the foreign service roster. The regiments may likewise receive a territorial designation; but, with the exception of these adoptions, the scheme does not seem to be at present practicable in this Presidency.

3. The reasons for this conclusion are fully explained in the Adjutant-General's letter above mentioned, wherein, you will observe, it is shown that the recruiting of the Madras Army is now, practically speaking, confined to two districts only. These are the poorest in the Presidency, to the inhabitants of which army service still offers some attraction.

4. In other parts of Madras want of confidence in the security of military service brought about by changes of late effected, and improvement in the status of the people, have gradually alienated from the army the classes from which recruits were formerly obtained.

5. Unless,

5. Unless, therefore, some inducement be conceded in the form of increased pay and other advantages with a view to opening again the recruiting fields that have been closed, the prospect of carrying out the project of territorialising the Madras Army, in the correct sense of the term, would seem to be gloomy in the extreme.

6. Colonel Faunce's Memorandum with letter No. 7-C., Native Army—Recruiting, dated 26th May 1885, from the Adjutant-General on the subject of the unsatisfactory state of recruiting in the Madras Army, is enclosed. This document has been, unfortunately, for a long time overlooked in the office of the Controller of Military Accounts, to whom the proposals were submitted for financial review.

7. With reference to the formation of reserves, I am to remark that further information appears to be necessary if the question is to be thoroughly worked out. It is, however, quite clear that if we are unable to fill the ranks of our army as it stands, the raising of a reserve will be out of the question. The impracticability already alluded to of territorialising the regiments is another fact which strikes at the root of this part of the scheme, while the effect of the measure with reference to the present condition of service and our existing pension system does not seem to have been considered.

8. With these remarks I am to say that the Government of Madras await a further expression of the wishes of the Government of India in regard to this subject.

No. 2848-N-A., Organisation, dated Ootacamund, 25th November 1885.

From Brigadier-General *W. K. Elles*, C.B., A.D.C., Adjutant General, Madras Army, to Lieutenant-Colonel *A. Kenney-Herbert*, Officiating Secretary to Government of Madras, Military Department.

In compliance with the instructions contained in your reference memorandum relative to the proposed formation of a reserve to the infantry of the Native Army and the introduction of a system of regiments of linked battalions, herewith returned, No. 4844,* of 3rd September 1885, I have the honour, by direction of the Provincial Commander in Chief, to submit, for the consideration of Government, a memorandum drawn up by the Deputy Adjutant General, reporting in detail on the subject under reference, in which Major General Rowlands fully concurs, and to offer the following general observations.

*Also Memorandum No. 6282, dated 9th November 1885.

2. The scheme proposed by the Government of India for the re-organisation of the native armies includes two distinct operations:—

(1.) The localisation and grouping of battalions.
(2.) The formation of a reserve.

3. The general conditions prescribed by the Government of India have been observed as far as possible, but in one essential particular the directions cannot be followed. The connection between a localised regiment and the district in which it is localised will, in most cases, be either slight or wholly fictitious. This arises from the fact that two-thirds of the Madras infantry soldiers are recruited from two districts, in which four-and-a-half battalions only are quartered, and these districts include the city of Madras, with two battalions; so, while five regiments are localised in their recruiting ground, the five others will have their head-quarter stations in places foreign to two-thirds of their men.

4. It may be said that the localisation will in time create a connection and increase the proportion of local recruits, but there is little prospect of any such result under present conditions of the recruiting question.

The communications* which have from time to time been addressed to Government show how precarious is the supply of the native army and how urgently reforms are needed to make recruiting more secure. It has been shown that it is hopeless to extend recruiting more equally over the Presidency by increasing the proportion of recruits from the southern districts, unless the service can be made acceptable to the classes which have been alienated from it by a variety of circumstances, partly by changes in the army and consequent insecurity of the military career, and partly by the improved conditions of civil life.

*Letters No. 156-T-R and No. 7-C., Native Army—Recruiting, dated respectively the 8th February and 26th May 1885.

5. It is the opinion of officers who have most closely studied this question that unless the conditions of service in the native army are improved so as to be brought at least within the field of comparison with the many eligible careers afforded by civil life, the native army must depend more and more on the poorest parts of the Presidency, viz., the Northern Circars and Central Carnatic, that is, upon the districts from which it is now

now sought to dissociate one-half of the Madras Infantry and to which two-thirds of its men belong.

6. The utmost efforts do not avail to keep the army up to strength, and there is a steady increase in the numbers wanting to complete. The result of closing, in however slight a degree, the chief recruiting grounds to half the army may thus be predicated with certainty. If the supply of recruits were greater than the demand, the disturbance of the recruiting field might be effected with impunity, but with an ebbing tide the result cannot but accelerate the fall in numbers. The proper course would seem to be to rectify, in the first place, the causes of unpopularity of the service, and then, by localisation, to open up districts which are now practically closed to the recruiter.

7. The recruiting of the army is in an unsatisfactory state, but it is by no means without remedy. The whole question has only recently been discussed by Colonel Faunce in a Memorandum* which has been laid before Government, and it is consolatory to observe that reforms have been suggested which would cost little while promising good result.

* Forwarded with Adjutant-General's letter No. 7-C., Native Army—Recruiting, dated 26th May 1885.

8. The report on the scheme for the formation of a reserve is as full as possible, but it is necessarily imperfect, because the scheme itself is not only imperfect but has been partially withheld. The Memorandum of the Government of India, as communicated, contains but 29 paragraphs; but in one place paragraph 40 is quoted. As the scheme stands, it is entirely inconsistent with the present conditions of service, and its adoption would necessitate a revision of the pension system, of which, however, there is no suggestion.

9. The scheme has been reported on paragraph by paragraph, and it may suffice here to note that the preponderating dependence of the army on two districts of the Presidency will disturb the proposal that reservists should be trained by their own regiment, and unless special arrangements are authorised in the Northern Circars, will impose too heavy a duty on the two regiments therein localised. The same considerations will make it desirable not to keep the arms and accoutrements of the reservists entirely at the headquarters of regiments.

10. With reference to paragraph 7 of letter from the Government of India, No. 654-B., dated Simla, 25th August 1885, I am desired to say that the distribution, as proposed, in territorial regiments of the present regiments of the Madras Army will not, with one exception, affect the foreign service roster of the Madras infantry, as will be seen from a comparison between the roster as it now stands (marked A) and the proposed roster (marked B) forwarded herewith.

(A.)

ROSTER showing the Dates on which Regiments of Native Infantry Embarked at the Presidency on Foreign Service, and the Dates of their Return.

Regiments.	Date of Embarkation.	Date of Return.	REMARKS.
21st Regiment M.I.	5 March 1860	28 May 1861	(From China.)
16th „ „	2 February 1866	28 January 1869.	
25th „ „	9 May 1866	14 February 1869.	
30th „ „	27 February 1866	5 March 1869.	
29th „ „	19 April 1868	22 January 1871	(At Bombay, from China.)
7th „ „	9 March 1868	22 March 1871.	
12th „ „	23 December 1868	28 January 1872.	
19th „ „	27 February 1871	9 and 10 May 1872.	
13th „ „	23 November 1870	20 and 21 May 1872.	
14th „ „	24 January 1871	25 January 1874.	
10th „ „	18 December 1871	29 January 1875.	
27th „ „	20 February 1872	15 February 1875.	
17th „ „	3 February 1875	9 February 1878.	
15th „ „	28 January 1875	7 March 1878.	
6th „ „	9 January 1875	30 April 1878.	
24th „ „	2 and 3 March 1877	3 April 1880.	
32nd „ „	12 March 1878	21 January 1881.	
33rd „ „	9 April 1878	15 March 1881.	
23rd „ „	14 February 1878	22 March 1881.	
22nd „ „	22 March 1879	4 March 1882.	
31st „ „	11 March 1879	9 March 1882.	
2nd „ „	16 February 1881	15 January 1884.	
11th „ „	5 and 24 February 1881	27 March 1884.	
28th „ „	14 and 24 February 1882	27 January 1885.	
3rd „ „	11 and 24 February 1883	—	
9th „ „	5 January 1884	—	
5th „ „	13 March 1884	—	
26th „ „	11 January 1885	—	
20th „ „	5 October 1885		(Suakin.)
8th „ „	2 November 1885		(Suakin.)

(B.)

Number on Roster.	Battalion.	Territorial Regiment.	Number of Battalion on Foreign or Field Service.		Year in which in ordinary course Battalions will go on Foreign Service, and Number in Regiment then on Foreign Service.
			1*	2†	
1	21st Regiment M.I.	4	–	1	1886 vice 3rd (1.)
2	16th „ „	3	–	–	1887 „ 9th (1.)
3	25th „ „	8	–	1	1887 „ 5th (1.)
4	30th „ „	10	–	–	1888 „ 26th (1.)
5	29th „ „	1	–	–	1889 „ 21st (1.)
6	7th „ „	5	–	–	1890 „ 16th (1.)
7	12th „ „	6	–	2	1890 „ 25th (1.)
8	19th „ „	5	–	–	1891 „ 30th (2.)
9	13th „ „	9	–	–	1892 „ 29th (1.)
10	14th „ „	4	–	–	1893 „ 7th (1.)
11	10th „ „	8	–	–	1893 „ 12th (1.)
12	27th „ „	3	–	–	1894 „ 19th (1.)
13	17th „ „	6	–	–	1895 „ 13th (1.)
14	6th „ „	4	–	–	The results of the above ten years' foreign service reliefs would be that in 1891 a second battalion of the 5th ought to go on foreign service; but it could be easily detained until 1893, when it could be sent without causing any derangement of roster again until 1900, when two battalions of the 2nd Regiment would fall to foreign service together.
15	15th „ „	10	–	–	
16	24th „ „	5	–	–	
17	32nd „ „	8	–	–	
18	33rd „ „	1	–	–	
19	22nd „ „	9	–	–	
20	31st „ M.L.I.	2	–	–	
21	23rd „ „	2	–	2	
22	2nd „ M.I.	1	–	–	
23	11th „ „	7	–	–	
24	28th „ „	7	–	–	
25	3rd „ M.L.I.	2	1	–	
26	9th „ M.I.	7	1	–	
27	5th „ „	3	1	–	
28	26th „ „	10	1	–	
29	20th „ „	9	1	–	
30	8th „ „	6	1	–	

A regimental roster might well stand thus:

4th	5th
3rd	6th
8th	9th
10th	2nd
1st	7th

* Excluding battalions in Burma Expeditionary Force.
† Including battalions in Burma Expeditionary Force.

MEMORANDUM on the proposals for—

(1.) The formation of a reserve to the infantry of the Native Army.

(2.) The introduction of a system of regiments of linked battalions.

(3.) The localisation of such regiments.

1. In the last paragraph of the letter No. 654-B., dated 25th August 1885, the Government of India asks for any suggestions that may conduce to the success of the measures proposed.

2. Any such scheme as that contemplated to be in any sufficient degree successful on this side of India must be part of one comprehensive scheme for bettering the condition of the native soldier and making service in the army more popular for the reasons already given in the memorandum on recruiting, which was submitted to Government with this office letter No. 7-C., Native Army—Recruiting, dated 26th May 1885.

3. The localisation of regiments is apparently proposed to this end, but of itself this can have little appreciable effect; for putting aside the want of sufficient inducements for men to enlist, it is necessary that recruits should be obtainable in the district in which a regiment is localised to a sufficient extent to fill and keep up a territorial regiment; it is not practicable to make the permanent headquarters of one or more territorial regiments in particular districts merely because such districts furnish us with sufficient recruits for one or more such regiments; regiments must be distributed as the interests of the State require, and it happens with us that garrisons are mostly required in districts which give the fewest recruits.

4. In the Central Provinces we have four-and-a half battalions; at Cuttack (Orissa), one battalion; on the Western Coast, three battalions; in all eight-and-a-half battalions in localities whence we obtain no recruits.

5. To admit of a territorial character being given to the Native Army, so that, as proposed, regiments should be associated with some particular part of the country in which one of its battalions would ordinarily be quartered, it is necessary that recruits should be obtainable, if not from all the various districts of the Presidency, then, at least, from the districts in which the requirements of the State necessitate the regiments being quartered; but this is not so; the terms of service are such that none but the poorest classes will accept them, and these are found in the largest number in the Northern Circars, whence we draw 41 per cent. of our recruits, and where yet only two battalions are quartered; and again the Northern Circars, with the Central Carnatic, give 69 per cent. of our recruits, while only five battalions are quartered in those districts. Still, if the terms of service are made more liberal to accord with what men can earn throughout the Presidency, it is probable that other districts would give more recruits, though whether in sufficient numbers to fill a territorial regiment, can only be determined by experiment, and will depend entirely on the terms of service offered.

6. It is the more desirable to induce the classes of the more southern portions of the Presidency that used to enlist to again do so; for though not such tall, big men as those of the Northern Circars, they are undoubtedly more intelligent and better soldiers.

7. Restricting regiments to certain defined areas for recruiting would tend to make our regiments into class regiments, a change much to be deprecated, for which there is no necessity, and which all officers of the Madras Army, who were questioned by the Simla Army Commission, 1879, objected to. There is no necessity for it, because if only the terms of the service are made to accord in some degree with those offered to the police, and with what can be earned in other walks of life, there will be no lack of recruits, though it must be added that only a few weeks ago Native officers spoken to on the subject said that, even with greater inducements to enlist, it would not be easy to overcome the widespread feeling caused by the many reductions of late years, that men so induced to enlist might find themselves sent adrift as soon as the necessities of the moment ceased to operate.

8. However, if it be determined to localise regiments, it might be done as shown in the accompanying distribution list, and should it hereafter be found that regiments cannot keep themselves to full strength in their own districts, they might after they have used every effort for, say, six months, be allowed to send recruiting parties to the Northern Circars and Central Carnatic, whence we now get 69 per cent. of our recruits; but it should be made a rule that the proportion of Mussulmans to Hindus in regiments should be as 6 to 10.

9. The grouping of the present regiments, as shown in the distribution list, will not interfere with the foreign service roster as it now stands; for even including the regiments sent to Burma since it was drawn up, only two of the new regiments (excluding Pioneers) would have two of their battalions on field or foreign service, viz., the 2nd and the 6th; and of these, one battalion of the (proposed) 2nd Regiment returns to India from

from Burma in the present relief season, and the stay in Burma, with the expeditionary force of the (proposed) 6th Regiment, may not be prolonged.

10. If, however, there is any probability of the garrison of Burma being increased and taken from the Madras Army, it will not be possible, with the present number of battalions, to ensure only one at a time being on foreign or field service.

11. With regard to the rules for the formation of reserves, it may be remarked that any such scheme to be successful must be accompanied by a revision of the present terms of service; men who can obtain a pension of 4 rupees a month (with 1 rupee rice-money) if invalided at any time between 15 and 32 years' service, and men that make up their minds to be invalided generally manage to be so, will not give up 60 rupees a year, payable monthly at their homes, for *Rs.* 48. 8. (which is what, as reservists with one good-conduct badge, they would receive), payable in two instalments of 10 rupees at the end of 11 months, and *Rs.* 38. 8. at the end of 11 months; and this only if called out for training at the end of 11 months; if the training were deferred for two years (paragraph 11 of the scheme), no payment would be made (paragraph 10 of the scheme) for 22 months.

12. In the scheme paragraph 40 is alluded to, but only 29 paragraphs have been sent for remark.

13. The Madras Army Reserve of 160 per battalion of infantry (5,120 men) is to be formed "at once as fast as men can be obtained to take the place of men transferred to the reserve," but as we are, and have long been, under strength, and cannot with the present terms of service bring the army to full strength, it is evident that till these terms of service are altered no reserve will be formed.

14. To take the paragraphs of the scheme *seriatim*—

Paragraph 1. It is said that the Active Reserve is to be "composed of men under 12 years' service." From the fact that men can (paragraphs 17 and 18) obtain gratuities and pensions after various periods of colour and reserve service, it is evident that there is a mistake in this paragraph in saying that the active reserve is to be "composed of men under 12 years' service." What is apparently meant is that men will have the option of passing into the active reserve, provided they have not less than three, and not more than 12 years' colour service; for from paragraph 6 alone it seems clear that it is not, as stated in paragraph 1, intended that the active reserve should be "composed of men under 12 years' service," as by paragraph 6 men who have a combined colour and reserve service of 21 years are to be passed into the garrison reserve if physically fit for garrison duty; so that the active reserve will be "composed" of men of between three and 21 years' service and not of men under 12 years' service." It would seem better that paragraph 1 should read thus:—

"Each battalion* of infantry will have an active reserve of 218 men in Bengal, and of 160 men in Madras and Bombay. This reserve will be formed by the transfer thereto of volunteers who have completed not less than three, and not more than 12 years' colour service; they will remain in the active reserve till the completion of 21 years combined colour and reserve service, when they will (paragraph 6), be transferred to the garrison reserve if physically fit for garrison duty."

Paragraph 2. On what grounds may the approval of the commanding officer be withheld? It seems necessary to prescribe that the physical fitness or otherwise for active service of men wishing to pass into the active reserve should be certified by a medical officer.

Paragraph 3. A necessary rule, but with the present difficulty in getting recruits it means that the reserve will never be anything like 160 men per battalion; at best it will be something less than 10 per cent. of the present strength of regiments, which will be so much the more below strength.

Paragraph 4. Men who have taken their discharge without pension or gratuity might enter the active reserve, but the number of such men is very small.

Men discharged with gratuity are not likely to be found fit for the active reserve, as, with the exception of men discharged on disbandment, they are men who have been so discharged on being found by medical boards to be unfit for the service. Moreover, we know by the recent experience of 1882 that men, however anxious to re-enlist, have not, and cannot procure, the means of repaying the gratuity in a lump sum, and that when allowed to do so by instalments out of their receipts, few were found willing to re-enlist on such conditions, and that although in return they at once received a stipend paid monthly.

Pensioners are not likely to enter the reserve. Why should they? The lowest pension of

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* NOTE.—From a comparison of paragraph 1 with paragraphs 28 and 29, it would appear that the word "Regiment" in the original is a mistake for "Battalion." Irrespective of the difficulty of passing men into the reserve from the want of recruits to replace them, already spoken of, it does not seem to be probable, seeing the terms offered, that in this army any but a very small number of men willing to be transferred to the reserve will be forthcoming.

of a private is 4 rupees a month, with about 1 rupee in addition as rice-compensation, or 5 rupees a month. Why should a man give up 60 rupees a year paid monthly at his home, with no liability to be called out for training, for *Rs.* 48. 8. a year (supposing him to have as reservist one good-conduct badge) paid in two instalments at the end of the eleventh and twelfth months? Pensioners live from hand to mouth, are usually in debt, and could not give up the advantage of regular monthly payments at their homes for a deferred payment even if of a larger amount; much less can they do so when the deferred payment is less than their aggregate receipts for a similar period.

Paragraph 5. No remarks.

Paragraph 6. How is this paragraph to be worked with the present rules as to pensions?

(1.) Men do not "take their discharge" at "between 20 and 30 years' service;" such men only leave the service on being found by medical boards to be unfit for further service, when they are, under present regulations, entitled to a pension, and, for reasons already given, such men will not enter the reserve. It can be scarcely contemplated to deprive such men of the right to pension which they possess, and to force them into a garrison reserve? The more that then they would be worse off than men in the ranks of less than 20 years' service, who, if found unfit for active service, are under this paragraph ineligible for the garrison reserve, not having 20 years' service; but who, if of more than 15 years' service, would, under the regulations now existing, receive a pension for the rest of their lives. Supposing, however, a man of 20 years' colour service to pass into the garrison reserve, and to serve in it for four years, and then to be discharged as unfit for garrison duty (paragraph 16), he would then, under paragraph 17, appear to be entitled only to a gratuity of 12 months' pay (reserve pay?) of rank and good-conduct pay; whereas, had he been invalided after his 20 years' colour service (a matter easy of accomplishment), he would have received for life a pension of 4 rupees a month and rice-money.

Paragraph 7. This paragraph should be read with paragraphs 18 and 19, and it will be seen how necessary it is that any reserve scheme should form part of one comprehensive measure for the revision of the terms of service: for instance, paragraph 6 says, men may pass into the reserve if fit "physically fit for garrison duty," and therefore presumably if no longer fit for active service with 21 years' colour service; and paragraph 17, that men with 20 but less than 25 years' combined colour and reserve service, will be allowed a gratuity of nine months' pay and good-conduct pay; but a man of 20 (or even of 15) years' colour service is already, if physically unfit for active service, entitled by present regulations to a life pension.

Paragraph 8. No remarks.

Paragraphs 9, 10, and 11. The first of these three paragraphs says that reservists will receive certain rates of pay per mensem while at their homes; whereas, the second says they will be paid once a year in arrears when called out for training; and the last says that they will be embodied for training for not less than two months in two years.

Does this mean that reservists may, at the option of the Government, be called out either (1) for one month in each year, or (2) for two months in every two years? If only called out after an interval of two years, will reservists be paid up at the end of the intervening year; and if so, by whom and where? And will the medical examination be dispensed with?

Paragraphs 13 and 16. Certainly seem to contemplete an annual training, but the three paragraphs under review appear to throw some doubts on this point.

Then again—

(1.) Is any, and if so what, penalty to be exacted for absence without sufficient cause from training?

(2.) Who is to decide as to the sufficiency of the cause?

(3.) If a man is prevented by—

(*a*) illness.

(*b*) or other cause,

from attending the training, would he receive his reserve pay for the period since the last training, and how would it reach him?

(4.) If a reservist dies between two trainings, would his heir receive the reserve pay due up to the date of his death?

Stringent rules are required on these points, especially as regards (3), as it will be difficult to procure reliable certificates of sickness from out-of-the-way villages, and weakly men afraid of being discharged as unfit might scheme to avoid attendance at the training with the consequent medical examination. The best way to meet the difficulties would

would seem to be to make discharge with forfeiture of arrears of reserve pay the penalty, without appeal, for absence from training or when called out.

Paragraph 12. This question has been left by Government for future decision.

Paragraph 13. It will be necessary to arrange for the payment of the batta to the men at their homes, and of the issue of the free rail-passes at the station of departure. In most cases reservists would not have the means to pay the expenses of joining.

Paragraph 14. It is said that 2 rupees will be paid to the reservist annually to enable him "to keep up" certain articles of clothing; presumably these articles will, in the first instance, be issued free, for their cost would be some 10 rupees; as "native shoes" are not worn by men of the native army, it does not seem of much use making men of the active reserve keep up such things.

Paragraphs 15 and 16. No remarks.

Paragraphs 17, 18, and 19. It is difficult to understand how these rules can work with the present pension rules regarding a modification of which nothing is said.

A man now nominally enlists for life, that is, he cannot claim a pension till he has served 32 years, when he can obtain 7 rupees (and 1 rupee rice-money) a month, but practically he can obtain a pension of 4 rupees (and 1 rupee rice money) a month at any time after 15 years' service; that this is so is shown by the fact mentioned in the Memorandum on recruiting, already submitted to Government, that of 2,690 men pensioned in the years ending 31st December 1881, 1883, and 1884, 2,157 had less than 32 years' service, and of these 2,157, 1,416 had less than 25 years; these men receive full pay till pensioned, and then 5 rupees, all told, paid monthly at their homes for life. What are the inducements for them to volunteer for the reserve? *Rs.* 3. 8. paid at long intervals (paragraph 10), a gratuity of 12 months' reserve pay if discharged as unfit for garrison duty after less than 25 years, but more than 20 years' service, and "a modified pension," amount not stated, if so discharged after 25 years' service. It is extremely unlikely men will exchange the advantages they are now entitled to for such terms as these.

Paragraph 20. Does this mean that the 160 reservists per battalion are to be exclusive of non-commissioned officers, and that for the 160 there will be allowed six havildars and six naiks?

Paragraph 21. No remarks.

Paragraph 22. Documents of reservists should not, I think, be kept at the headquarters of the battalion from which they passed into the reserve.

All men enlisted in future, although enlisted by one battalion, are to be liable to serve in any of the other battalions of the regiment, and all men passed into the reserve by the three battalions of a group will be liable to serve with any of those three battalions. If regiments are localised the documents should be kept at the headquarter station of the territorial regiment, or, if reserve centres are formed, at those centres.

Paragraph 23. The arms and accoutrements would be dealt with in the same way as the documents.

Paragraphs 24, 25, and 26. The Sappers would continue to enlist as before, but principally in the Central Carnatic and Mysore. The reserve headquarters would be with the headquarters of the corps at Bangalore. The number of reservists for the Sappers would be 328.

The four cavalry stations might be the reserve headquarter stations for the 300 reservists of the cavalry, who would probably be distributed as follows:—

Bangalore - - - - - - - - -	150
Bellary - - - - - - - - - -	75
Secunderabad and Kamptee - - - - - -	75
Total - - -	300

The kit laid down in paragraph 14 is not quite suitable to a cavalry reservist. I would suggest the following modifications:—

For "1 pair pyjamas" *substitute* "1 pair khaki drawers."

For "1 pair Native shoes" *substitute* "1 pair ankle-boots."

Add "1 kummerbund."

The cavalry reservist could ride in such a dress, but he would probably require more than 2 rupees per annum to keep it up, say 3 rupees.

A pair of jack spurs should be kept at reserveheadquarters, in the same way as the arms, for the use of each cavalry reservist.

Paragraph 28. By this paragraph the Madras Army is treated differently from the Bengal and Bombay armies (paragraphs 27 and 29), and the active reserve is to be informed at once as fast as recruits can be obtained to take the places of men transferred to the reserve.

From this it would appear that regiments are not first to be made up to full strength, but that transfers to the active reserve may be made at once, subject to the following provisions:—

(1.) That regiments are not more than 10 per cent. under strength (paragraph 3).

(2.) That recruits can be found to replace men passed to the reserve. None of our infantry regiments are more than 10 per cent. (72) under strength, but they are all more or less below their establishments, the average being 14·43 per regiment on the 1st August 1885. With regard to the cavalry, the four regiments are now so considerably under strength that it will be some time before they can pass any men into the active reserve.

The average number of recruits enlisted by each infantry regiment per mensem during the first seven months of this year has been 3·05; passing men into the active reserve at this rate, therefore, will take more than four years to form the reserve, and regiments would still be under strength. If paragraphs 3 and 28 are to be read together, *i.e.*, that regiments may pass men into the reserve till they are 72 below strength, we shall never have our regiments, which are already on the average 14·43 short, up to established strength, that is, if men are willing to join the reserve, which they are not likely to do under a scheme such as this. If, on the other hand, paragraph 28 is to be read alone, and we are only to pass men into the reserve when up to full strength (we being on the average 14·43 below), a reserve will never be formed. The fact is that the first step to take is to improve the terms of army service sufficiently to make service therein popular; petty concessions of free passes for men on the few occasions they go on furlough, a reduction by a few years of the periods at which good-conduct badges can be earned without increasing the number that can be earned, calling regiments by territorial titles, inviting men to pass into a reserve for less pay, and that less often paid than the pensions present rules allow, will not attract men. It is no use tinkering at the terms of service; if men are likely to be required, they must be induced to enlist now, while there is time to train by a liberal revision of their terms of service, which undoubtedly in a day of pressure must be conceded, though then the result may not be successful.

(signed) *E. Faunce*, Colonel,
Deputy Adjutant-General, Madras Army.

Ootacamund, the 25th November 1885.

DISTRIBUTION LIST of REGIMENTS of MADRAS INFANTRY divided into Groups of Two Battalions for Pioneers, and Three Battalions for all other Regiments.

Regiment.	Battalions of which each Regiment will be composed, showing present Stations.	Former Designation of Battalions.	Present Facings.	Territorial Designation and Recruiting Area.	Headquarter Station of Territorial Regiments.
Pioneer	1st Pioneers, Burma Expeditionary Force (from Bangalore).	1st Battalion 1st	White	*Madras Pioneers*	Bangalore.
	4th Pioneers, Pishin	1st „ 4th	Yellow	General	
1st	2nd Madras Infantry, Saugor	1st „ 2nd	Green	*Ganjam*	Berhampore.
	29th „ „ Berhampore	1st „ 15th	White	-	
	33rd „ „ Belgaum	1st „ 17th	Yellow	Ganjam	
2nd	3rd Light Infantry,* Tonghoo (under orders to Trichinopoly).	1st „ 3rd	Green	*Madras Light Infantry*	Trichinopoly.
	23rd Light Infantry,† Burma Expeditionary Force (from Sitabuldi).	1st „ 12th	„	Trichinopoly, Tanjore, Madura, and Tinnevelly.	
	31st Light Infantry, Mangalore	1st „ 16th	„	-	
3rd	5th Madras Infantry, Rangoon*	1st „ 5th	Yellow	*Vizagapatam*	Vizianagram.
	16th „ „ Vizianagram	2nd „ 5th	„	Vizagapatam, Godavari, and Jeypore.	
	27th „ „ Jubbulpore†	1st „ 14th	„	-	
4th	6th „ „ Belgaum	1st „ 6th	White	*Salem*	Bangalore.
	14th „ „ Bangalore	2nd „ 6th	„	-	
	21st „ „ Burma Expeditionary Force* (under orders to Tonghoo).	1st „ 11th	„	Salem, Coimbatore, and North Arcot.	
5th	7th Madras Infantry, Kamptee	1st „ 7th	Yellow	*Deccan*	Secunderabad.
	19th „ „ Cannanore	2nd „ 7th	„	-	
	24th „ „ Kamptee†	2nd „ 12th	Green	Nizam's Dominions, Kistna and Kurnool.	
6th	8th „ „ Suakin*	1st „ 8th	White	*Mysore*	Bangalore.
	12th „ „ Burma Expeditionary Force (from Bangalore).	2nd „ 8th	„	Mysore Country and North Arcot.	
	17th Madras Infantry, Secunderabad	2nd „ 1st	„	-	
7th	9th „ „ Port Blair*	1st „ 9th	Green	*Madras*	Madras.
	11th „ „ Secunderabad	2nd „ 9th	„	Madras, South Arcot, Chingleput, and Nellore.	
	28th „ „ Madras	2nd „ 14th	Yellow	-	
8th	10th „ „ Vellore	1st „ 10th	„	*North Arcot*	Vellore.
	25th „ „ Burma Expeditionary Force (from Bellary).	1st „ 13th	Green	North Arcot	
	32nd Madras Infantry, Secunderabad	2nd „ 16th	Yellow	-	
9th	13th „ „ Bellary	2nd „ 3rd	White	*Bellary*	Bellary.
	20th „ „ Suakin*	2nd „ 2nd	Green	Bellary, Anantapur, Cuddapah, and Southern Mahratta Country.	
	22nd „ „ Quilon	2nd „ 11th	White	-	
10th	15th „ „ Madras	2nd „ 4th	Yellow	*Chingleput*	Madras.
	26th „ „ Thayetmo*	2nd „ 13th	Green	Chingleput, Madras, Nellore, and South Arcot.	
	30th „ „ Trichinopoly	2nd „ 15th	White	-	

* On foreign service, or serving beyond limits of Madras Presidency, Pioneers not included.

† Under warning orders for First Army Corps and Reserve Division.

14 September 1885. (signed) *H. R. H.*

No. 7-C., "Native Army—Recruiting," dated 26th May 1885.

From the Adjutant-General, Madras Army, to the Secretary to Government, Military Department.

In continuation of my letter No. 156-T.-K., "Native Army—Recruiting," dated 8th February 1885, and with reference to previous correspondence on the question of recruiting for the Native Army of this Presidency, I am now desired to submit, for the information and consideration of Government, a memorandum which has been drawn up by Colonel Faunce, Deputy Adjutant-General, under the orders of the Commander-in-Chief.

2. This memorandum deals with the subject under two heads, showing first the difficulty which now exists in getting good recruits for the ranks of the Madras Army, and also giving the reasons which are believed to be the cause of this difficulty.

Secondly, in the memorandum a scheme is roughly given, in which certain alterations in the terms of enlistment, pension rules, &c., are suggested, which it is thought would not only tend to make service in the ranks more popular than it apparently is at present, but would also ensure regiments being more efficient and fit for service than they are under existing pension regulations, which require men to serve on for a service of 32 years for pension, and which result in a regiment, when put under orders for active service, having to leave a considerable number of men behind in consequence of the various disqualifications for rough work caused by age and length of service.

3. Colonel Faunce is an officer of varied and considerable experience in the Madras Army, both staff and regimental, and his Excellency considers that the memorandum herewith submitted is deserving of the serious consideration of Government.

No. 552-Camp, "Native Army—Organisation," dated Camp Delhi, 26th December 1885.

From Major-General Sir *T. D. Baker*, K.C.B., Adjutant-General in India, to Colonel *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

I am directed by the Commander-in-Chief to acknowledge the receipt of Military Department No. 1085-B., of 2nd November, and of No. 478-B., of 10th December, forwarding, for the opinion of his Excellency, a draft Army Circular and draft rules regarding the organisation of reserves for the Native Army.

2. Draft rules for this purpose had already been prepared in this office under the instructions contained in your letter No. 1085-B., of 2nd November, and were ready for transmission to you.

3. The Commander-in-Chief has now carefully reconsidered both sets of rules, and I am to submit a revised copy of the rules prepared in this office, which his Excellency now recommends for adoption.

4. The only points of difference between the two sets of rules which seem to require explanation are the following:—

(The numbers quoted are those of the revised (Adjutant-General's) rules).

Paragraph 6. Has been revised in accordance with paragraph 6 of the Military Department draft rules.

Paragraph 8. The Commander-in-Chief agrees that men who have been discharged with gratuity should only be taken into the garrison reserve.

Paragraph 12. The training of the reserve men presents many practical difficulties, and it will be prudent to make the rules on this head elastic and for the present tentative. The best plan appears to be that now proposed, and his Excellency is of opinion that this plan should be tried for, say, the next three years, after which, if found desirable, the regulations may be modified. It does not appear necessary to provide arms or accoutrements for the training of the garrison reserve.

An allowance for the care and repair of the 128 stand-of-arms will have to be made to commanding officers.

Paragraph 14. The rates of increase to pension have been added in this paragraph. They appear to be sufficient.

Paragraph

Paragraph 18. The Commander in Chief thinks that an annual training for one month is necessary to maintain the efficiency of the active reserve. For the garrison reserve one month's training in two years will be sufficient.

Paragraph 21. The pension to men having a total colour and reserve service of 25 years will, it is presumed, be an invalid pension, and will be granted only to men pronounced unfit for garrison duty. It seems necessary to lay down this condition distinctly, in order that this pension may not be confounded with the pension which, under the new rules, will be claimable as a matter of right after 21 years' colour service. The Commander in Chief considers that the modified rate of pension for sepoys proposed in the Military Department draft rules is suitable, but that a havildar should get *Rs.*5. 8. so that both ranks should lose more nearly the same proportion of the full rates of pension.

Paragraph 22. The Commander in Chief does not recommend a fixed allowance should be made for the clothing of the reserve men. It must in any case be made up regimentally to insure the necessary uniformity; and as it would only be used for one month in the year, its renewal would not cost *Rs.* 2. 8. a man annually, while, on the other hand, its first cost would be considerably in excess of this sum. The plan proposed in the revised paragraph appears to the Commander in Chief to be the best.

5. No rule has been inserted regarding penalties to be enforced in cases of absence from training or when called out for field service, as the Judge Advocate General is of opinion that, though reserve men will draw military pay and will be borne on the rolls of their regiment, a special enactment will be necessary to render them subject to the Articles of War. This point will be taken up separately in view to the insertion of the necessary clauses in the new Indian Army Act.

6. Regarding the training of the cavalry reserves, the Commander in Chief does not at present consider that any compensation to the Chunda is necessary for the use of the horses, and would prefer to leave this point for future adjustment.

7. Regarding the proposed gradual formation of the reserves, the Commander in Chief thinks that it will be sufficient to direct that the reserves may be commenced as soon as a regiment has been raised to its new strength, and the rules on this subject have been altered accordingly.

8. In regard to the draft India Army Circular forwarded with Military Department No. 1085-B., dated 2nd November 1885, the Commander in Chief desires strongly to urge upon the Government the omission, for the present at all events, of paragraph 4, regarding the placing on one list for promotion of the British officers of the linked battalions. His Excellency has not yet been able to devote full attention to the point, and in a matter of such vital importance, both to the interests of the officers and efficiency of the service, it is obvious that the most careful deliberation is necessary before giving an opinion. The Commander in Chief further observes that this proposed alteration in the present regimental system does not appear to have been contemplated by Sir Donald Stewart. In the remainder of the draft circular his Excellency entirely concurs.

No. 316-B., Organisation, dated Fort William, 25th February 1886.

From Col. *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India.

In continuation of my letter No. 1085-B., of the 2nd November 1885, and with reference to paragraph 8 of your No. 552, dated the 26th December 1885, I am directed to forward herewith, for the final concurrence of his Excellency the Commander in Chief, a draft India Army Circular, notifying certain changes in the conditions of service of the Native Army. The rules for the formation of the reserves are attached as an Appendix to the Circular, but for the sake of convenience those rules have been dealt with separately in my letter No. 317-B., of this date.

No. 317-B., Organisation, dated Fort William, 25th February 1886.

From Col. *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department, to the Adjutant General in India.

With reference to your letter No. 552, dated the 26th December 1885, I am desired to forward, for the final concurrence of his Excellency the Commander in Chief, the draft rules for the formation of reserves, which will appear in an Appendix to the India Army Circular, notifying the changes in the conditions of service of the Native Army, forwarded with my letter No. 316-B., of this date.

2. The rules are, with slight alterations, those forwarded with your letter under reply; but there is one point on which the opinion of the Commander in Chief is still required, and that is whether there should be any cavalry reserve in the Madras Army. If so, then it will be necessary to modify somewhat paragraph 27.

3. The reserve for the Sappers and Miners has been fixed with reference to the new organisation of those corps.

4. I am to add that it may very probably be necessary for financial reasons to omit paragraph 3 of the rules, and to start the formation of the reserves on the existing establishment of Bengal regiments.

No. 2387-Camp, dated Fort William, 5th March 1886.

From the Adjutant General in India to Col. *O. R. Newmarch*, Officiating Secretary to the Government of India, Military Department.

IN reply to Military Department Letter No. 316-B., Organisation, dated the 25th February 1886, I am directed to state that the Commander in Chief concurs in the draft India Army Circular therewith forwarded, notifying certain changes in the conditions of service of the Native Army.

2. It is observed that the new regiments, which it was proposed to raise, but which are at present in abeyance, have been included in the list of "linked" battalions.

No. 1413-B., Native Army—Organisation, dated Simla, 2nd October 1886.

From Major General *O. R. Newmarch*, Secretary to the Government of India, Military Department, to the Adjutant General in India.

WITH reference to the correspondence ending with your letter No. 2318-Camp, dated 5th March 1886, I am directed to forward herewith, for the concurrence of the Commander in Chief, and for any remarks his Excellency may desire to offer, the annexed copy of an India Army Circular which it is proposed to issue immediately, notifying certain changes in the conditions of services in the Native Army in India. I am to explain, for his Excellency's information, that for financial and other reasons it has been decided that for the present the formation of reserves shall be limited to the Bengal Army, and to 100 men per regiment.

2. The favour of a very early reply is requested.

No. 4465-B., Native Army—Organisation, dated Head Quarters, Simla, 11th October 1886.

From Major General Sir *T. D. Baker*, K.C.B., Adjutant General in India, to Major General *O. R. Newmarch*, Secretary to the Government of India, Military Department.

WITH reference to Military Department letter, No. 1413-B., dated 2nd October 1886, I am directed by the Commander in Chief to make the following remarks on the draft India Army Circular therewith submitted, notifying certain changes in the conditions of service in the Native Army in India, and publishing rules for the formation of reserves.

(1.) Paragraph 3. The effect of this paragraph as it now stands will be that, for some time to come, *i.e.*, until recruits enlisted after 31st October 1886 have become trained soldiers, there will be no material forthcoming for transfer to the battalion warned for service.

In case it should be thought well to provide for a sudden emergency, before the new conditions of service have had time to produce a supply of men liable to such transfer, it is suggested for the consideration of Government that there is nothing in the attestation of the sepoy now serving which would prevent his transfer to a linked battalion if necessary. The omission of the words "enlisted under the new condition specified in this order" would leave the door open for providing for any such emergency; but perhaps it would be safest in practice, to obviate any chance of dissatisfaction, to trust to volunteering from the other battalions to meet any such case.

(2.) Paragraph 4.

(2.) Paragraph 4. The 14th, 15th, and 45th Sikhs should come after the 13th, 16th, and 17th Bengal Infantry in the list of battalions to be linked together.

The Commander in Chief thinks it would be advisable to include the new Pioneer Corps (34th) and the 35th, 36th, and 37th Sikhs, which have been sanctioned by the Secretary of State for India as an addition to the Bengal Army, in the list of linked battalions, the remark "to be raised together" being noted opposite these corps, as in the case of the 2nd Battalion, 3rd Goorkhas. This seems to his Excellency to be most desirable.

(3.) Paragraph 5. The words "the infantry of" should be added after the words "into" in the first line of clause 2, paragraph 5.

(4.) Paragraph 10. Under Article 100, India Army Regulations, Vol. I., Part II., the artillery and infantry of the Hyderabad Contingent are entitled to good-conduct pay as follows:—

	Rs.
1st rate, after 5 years' service - - - -	1 monthly.
2nd „ 10 „ - - - -	2 „

Under the India Army Circular the artillery of the Hyderabad Contingent are excluded from the grant of good-conduct pay, while the infantry of that force are brought on the same footing as the infantry of the Bengal Army. The reason for this is not apparent. The omission of the Merwarra Battalion from the list of local corps is also observed.

(5.) Paragraphs 12 and 13. The Commander in Chief recommends that the men now in the army should be given the option of electing the new pension rules. As the draft India Army Circular stands, it is apparently only men who enlist after 31st October 1886 who will benefit by the new rules, and they will therefore not come into operation until 1907. Indeed, without the new pension rules, his Excellency does not see how the garrison reserve (paragraph 6 of Appendix) can come into existence, after the word "army;" therefore, in the 4th line of paragraph 12, his Excellency suggests the insertion of the following clause: "This rule will also apply to all men now in the service who may elect to come under it," as it appears to his Excellency very necessary to make it clear that the new pension rules apply to men now in the service if they elect them.

(6.) Paragraph 6 of Appendix. The word "infantry" in the first line, and the words "of infantry" in the third line, might be omitted as the reserves apply to that branch only.

(7.) Paragraph 21 of Appendix. As the rules now stand, there is nothing to prevent a man remaining in the active reserve if he is bodily fit up to 25 or more years' service, but paragraph 21 makes no provision for an invalid pension for him.

This should be so worded as to show that he must go into the garrison reserve before being pensioned.

2. With the exceptions above noted, the draft India Army Circular is concurred in by the Commander in Chief.

[*The India Army Circular above referred to was eventually issued on* 31*st October* 1886, *as Clause* 170 *of* 1886. See *p.* 127.]

No. 1480-B., Organisation, dated Simla, 14th October 1886.

From Major General *O. R. Newmarch*, Secretary to the Government of India, Military Department, to the Adjutant General in India.

I AM directed to acknowledge the receipt of your letter No. 4465-B., Native Army—Organisation, dated the 11th October 1886, and to reply as follows to the remarks of the Commander in Chief therein contained on the draft India Army Circular regarding changes in the conditions of service in the Native Army in India and the formation of reserves.

Clause I.—The Government of India concur in the conclusion arrived at by the Commander in Chief that it would be better to trust to volunteering than to make any provision in the Circular for the transfer to a linked battalion of men enlisted under the present conditions of service.

Clause II.—The Government of India would prefer that the linking of the new pioneer corps and the three Sikh regiments should be notified hereafter on issue of the Circular directing their formation.

Clause III.—The addition proposed in paragraph 5 of the Circular has been adopted.

Clause IV.—It was not intended to give the new rates of good-conduct pay laid down in paragraph 10 of the Circular to the Hyderabad Contingent, which has rules of its own, and the Circular has been amended accordingly; the Merwarra Battalion was omitted as being a police battalion, but has now been included.

Clause V.—The following addition has been made in paragraph 12 of the Circular after the word "Army?" in line 4: "The ordinary pension is also admissible after 21 years' service to all men now in the Army." This alteration seems sufficiently to meet his Excellency's wishes; no alteration in paragraph 13 is considered necessary, as it is certain that no man who can claim a pension after 15 years' service will take a gratuity.

Clause VI.—The word "infantry" has, as suggested, been struck out of paragraph 6 of the Appendix to the clause.

Clause VII.—With reference to the remark that paragraph 21 of the Appendix to the clause should be so worded as to show that a man must go into the garrison reserve before being pensioned, I am to invite his Excellency's attention to paragraph 6 of the Appendix, which shows that a man must pass into the garrison reserve after 21 years' colour and reserve service.

2. The date of enlistment has been altered to the 30th November 1886, as the order will not reach many corps till some time after the 31st October.

3. The India Army Circular amended, as above explained, will now be published.

No. 1496-B., Organisation, dated Simla, 16th October 1886.

From Major General *O. R. Newmarch*, Secretary to the Government of India, Military Department, to the Secretary to the Government of Madras, Military Department, and to the Secretary to the Government of Bombay, Military Department.

In forwarding herewith, for the information of the Madras—Bombay Government, a copy of a Special India Army Circular notifying certain changes in the conditions of service of the Native armies in India, I am directed to request that, under the orders of his Excellency the Governor in Council, the Government of India may be furnished, for publication in India Army Circular, with a list showing how the regiments of Madras—Bombay Infantry will be linked together in the manner shown in paragraph 4 of the Circular.

2. All further details should be reserved for future and separate consideration; all that is required at present is a list similar to that of the Bengal Army. As the enlistments under the new conditions of service will begin from the 1st December, I am to request that it may be sent (by telegram if necessary) as soon as possible.

3. I am to add, for the information of the Madras—Bombay Government, that for financial reasons it has been decided for the present to limit the formation of the reserves to 100 men in the infantry of the Bengal Army.

No. 188-P., dated Poona, 1st November 1886.

From Brigadier General *M. W. Willoughby*, Secretary to the Government of Bombay, Military Department, to Major General *O. R. Newmarch*, Secretary to the Government of India, Military Department, Calcutta.

I am directed to acknowledge the receipt of your letter, No. 1496-B., Organisation, of the 16th ultimo, forwarding copy of a Special India Army Circular, notifying certain changes in the conditions of service of the Native armies in India, and requesting to be furnished, for publication, with a list showing how the regiments of Bombay infantry will be linked together in the manner shown in para. 4 of that Circular.

2. In reply, I am directed to state, for the information of the Government of India, that the regiments in this Presidency will be linked as follows:—

Bombay Infantry.

1st	Regiment	1st, 8th, and 9th.
2nd	„	2nd, 12th, and 13th.
3rd	„	3rd, 5th, and 10th.
4th	„	4th, 23rd, and 25th.
5th	„	14th, 16th, and 17th.
6th	„	19th, 20th, and 22nd.
7th	„	7th, 24th, and 26th.
8th	„	27th, 29th, and 30th.

3. I am to add that the 28th Regiment, Bombay Infantry, will remain unattached, with a view to forming it eventually, if sanctioned, into a pioneer corps, and the 21st Bombay Infantry (Marine Battalion), employed on special duties, will also remain unattached.

[*N.B.—The India Army Circular referred to in the foregoing Correspondence was eventually issued on 23rd November 1886 as Clause 188 of 1886.* *See* p. 167.]

[Special.—Applicable to the Madras and Bombay Presidencies.]

INDIA ARMY CIRCULARS,—1886. [Clause 188].

Government of India, Military Department, Fort William, the 23rd November 1886.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

ORGANISATION.—NATIVE ARMY.

CHANGES in the Conditions of Service in the Native Armies in India.

WITH reference to paragraph 4 of Special India Army Circular, dated the 13th October 1886, the linking of the Regiments of the Madras and Bombay Armies will be as follows:—

Madras Infantry.

1st (Pioneers).	4th (Pioneers).	
2nd	29th	33rd
3rd	23rd	31st
5th	16th	27th
6th	14th	21st
7th	19th	24th
8th	12th	17th
9th	11th	28th
10th	25th	32nd
13th	20th	22nd
15th	26th	30th

Bombay Infantry.

1st	8th	9th
2nd	12th	13th
3rd	5th	10th
4th	23rd	25th
11th	16th	17th
19th	20th	22nd
7th	24th	26th
27th	29th	30th

The 21st (Marine Battalion) and 28th Regiments, Bombay Infantry, will not be linked with any other corps.

E. H. H. Collen, Lieutenant Colonel,
Officiating Secretary to the Government of India.

— No. 89. —

EXTRACT MILITARY DESPATCH to the Government of India, dated 30th December 1886, No. 379, Paragraph 17.

17. IN acknowledging receipt of correspondence regarding the formation of a second battalion of the 5th Goorkha Regiment, I would observe that I should be glad to be informed of the reasons for which your Government have declined to sanction the enlistment of Gurhwallis, some of whom are believed to have proved themselves excellent soldiers.

[In reply to paragraph 27 of your Military Despatch No. 168, dated 25th October 1886.]

— No. 90. —

[Special.—Applicable to the Three Presidencies.]

INDIA, ARMY CIRCULARS, 1886. [Clause 195.]

Government of India, Military Department, Fort William, the 30th December 1886.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

ESTABLISHMENTS.—BRITISH ARMY.

Revised Regimental Establishments, British Cavalry.

THE following revised establishment of British regiments of cavalry serving in India is sanctioned, in supersession of that notified in Clause 227, India Army Circulars, 1881:—

RANK.	REGIMENT OF CAVALRY.
	India.
Lieutenant Colonels	2
Majors	4
Captains	4
Lieutenants	15
Adjutant (*)	1
Riding Master	1
Quartermaster	1
TOTAL Officers	28

* May be a Captain or a Lieutenant.

RANK.	Regiment of Cavalry.
	India.
Regimental Sergeant Major (Warrant Officer)	1
Bandmaster (Warrant Officer)	1
Quartermaster Sergeant	1
Sergeant Trumpeter	1
Sergeant Instructor in Fencing	1
Paymaster Sergeant	1
Armourer Sergeant	1
Saddler Sergeant	1
Farrier Quartermaster Sergeant	1
Orderly Room Sergeant	1
Troop Sergeant Majors	8
Troop Sergeant Major Roughrider	1
Sergeants	23
Sergeant Farriers	8
Total Warrant Officers and Sergeants	50
Trumpeters	8
Corporals	32
Privates	512
Total Rank and File	552
Total Officers and Men	630

E. H. H. Collen, Lieutenant Colonel,
Officiating Secretary to the Government of India.

— No. 91. —

Extract Military Despatch to the Government of India, dated 13th January 1887, No. 10 (paragraph 2).

2. I approve of the augmentation of the establishment of the medical staff in India by two officers, as proposed in your Military Despatch, No. 150,* dated 27th September 1886. Two officers will accordingly be sent out during the next trooping season, in addition to the ordinary relief.

*See pp. 121–4.

— No. 92. —

(20—India—49.)

LETTER from the War Office to the India Office.

Sir, War Office, 18 January 1887.

I AM directed by Mr. Secretary Stanhope to request that you will have the goodness to lay before the Secretary of State for India the correspondence relative to the reinforcements to the European garrison of that country, embodied in your letter of 17th September 1885 (No. M. 12,468) and subsequent communications, and to inform Viscount Cross that, under the decision come to, as modified by the postponement of this reinforcement from 1886-87 to 1887-88, arranged at the request of the Government of India, as conveyed in your letter of 15th May 1886 (No. M. 4584), the necessary steps are being taken to provide the six batteries of garrison artillery, and the 50 men per battalion of infantry now in India, with a view to their being dispatched to that country in the course of the next trooping season (1887-88).

I am, &c.

The Under Secretary of State for India. (signed) *Ralph Thompson.*

— No. 93. —

(M. 613.)

LETTER from the India Office to the War Office.

Sir, India Office, 7 February 1887.

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of your letter of 18th January 1887, 20—India—49, stating that, under the decision come to in the correspondence* with the War Office in 1885-86, on the subject of the reinforcements to the European garrison of India, as modified by the postponement of the dispatch of six garrison batteries of artillery, and 50 men per battalion of infantry in India, until the trooping season 1887-88, the necessary steps are being taken to provide the six garrison batteries, and the 50 men per battalion, in view to their being dispatched to India in the course of the next trooping season.

* Ending with W.O. letter of 31 July 1886.

20—India—34.

2. The Government of India have already been informed of these arrangements.

I have, &c.

The Under Secretary of State for War. (signed) *Allen Johnson*, Major General, Military Secretary.

— No. 94. —

(20—India—51.)

LETTER from the Horse Guards to the India Office.

Horse Guards, War Office,
4 February 1887.

Sir,

WITH reference to the letter from this Department of the 13th November, and the India Office letter in reply thereto, dated 4th December last (M. 11,503), I am directed by the Field Marshal Commanding in Chief to acquaint you, for the information of the Secretary of State for India, that sufficient men are now forthcoming to complete the 7th Dragoon Guards to the new establishment, and the necessary steps will be taken in regard to the promotion and appointment of the additional officers rendered necessary by the increase, and the Commander in Chief in India has been authorised to complete the new establishment of non-commissioned officers.

I have, &c.
(signed) *E. Bulwer*,
Deputy Adjutant General.

The Under Secretary of State
for India.

— No. 95. —

(M. 1327.)

LETTER from the India Office to the War Office.

India Office, 8 February 1887.

Sir,

I AM directed by the Secretary of State for India in Council to acknowledge the receipt of the Deputy Adjutant General's letter of 4th February 1887 (No. 20—India—51), stating that sufficient men are now forthcoming to complete the 7th Dragoon Guards to the new establishment, and that the necessary steps will be taken in regard to the promotion and appointment of the additional officers rendered necessary by the increase, and that the Commander in Chief in India has been authorised to complete the new establishment of non-commissioned officers.

I have, &c.
(signed) *Allen Johnson*, Major General,
Military Secretary.

The Under Secretary
of State for War.

— No. 96. —

TELEGRAM from Viceroy, dated 1st March 1887.

YOURS 14th October 1885. We have taken for the Budget Estimate all battalions of Bengal infantry as being raised to 932 of all ranks; also for formation of one Goorkha, three Sikh, and one Pioneer battalion, and one squadron of Guides Cavalry, also for reserves at 218 per Bengal infantry battalion, and 160 per Madras and Bombay infantry battalion.

— No. 97 —

(Applicable to the three Presidencies.)

INDIA ARMY CIRCULARS, 1887.

(Clause 43.)

Government of India, Military Department,
Fort William, 5 March 1887.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

Organisation.—Native Army.

Raising of the Regimental Reserves of the Bengal Army, and extension of the Reserve System to the Madras and Bombay Armies.

WITH reference to para. 5, clause 170, India Army Circulars of 1886, the Governor General in Council is pleased to direct that the system of reserves therein sanctioned shall now be extended to the Madras and Bombay Armies, the numbers being limited to 160 men per battalion of Madras and Bombay Infantry.

2. The Governor General in Council also directs that, in modification of para. 2 of the Appendix to the above-quoted circular, "Organisation of Reserves," the strength of the reserves of the Bengal Army shall be raised to 218 men per battalion.

3. These orders will have effect from 1st April 1887.

(signed) *E. H. H. Collen*, Lieut. Colonel,
Officiating Secretary to the Government of India.

— No. 98. —

(Applicable to the Bengal Presidency.)

INDIA ARMY CIRCULAR, 1887.

(Clause 44.)

Government of India, Military Department,
Fort William, 14 March 1887.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

Organisation.—Native Army.

Addition to the existing establishment of regiments of Bengal Infantry and of the Punjab Frontier Force.

WITH the sanction of Her Majesty's Government, the Governor General in Council directs that the established strength of a battalion of Bengal Infantry and of the Punjab Frontier Force shall in future be—

Subadars	8
Jemadars	8
Havildars	40
Naiks	40
Drummers	16
Sepoys	800
Total	912

2. This order will have effect from the 1st April 1887.

(signed) *E. H. H. Collen*, Lieut. Colonel,
Officiating Secretary to the Government of India.

— No. 99. —

(Applicable to the Bengal Presidency.)

INDIA ARMY CIRCULARS, 1887.

(Clause 46.)

Government of India, Military Department,
Fort William, 23 March 1887.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

Organisation.—Native Army.

Formation of Five additional Battalions of Bengal Infantry (including 1 Goorkha Battalion), and the addition of One Squadron to the Cavalry of the Corps of Guides.

WITH the sanction of Her Majesty's Government, the Governor General in Council directs the addition of the following troops to the Bengal Army:—

3 Battalions of Sikh Infantry.
1 Battalion of Pioneers.
1 Battalion of Goorkhas.
1 Squadron of Cavalry.

2. The three battalions of Sikh Infantry will be designated the 35th, 36th, and 37th, and will be linked together. The Pioneer battalion will be designated the 34th (Pioneers), and will be linked with the 23rd and 32nd Bengal Infantry (Pioneers).

3. The establishment of these regiments will be as follows:—

British:	
Commandant	1
Wing commanders	2
Wing officers	5
Medical officer	1
Native:	
Subadars	8
Jemadars	8
Havildars	40
Naiks	40
Drummers	16
Sepoys	800

4. To form the nuclei of the Sikh and Pioneer regiments, volunteers will be called for, under the orders of His Excellency the Commander in Chief, from existing regiments of Bengal Infantry in which the proper classes are serving.

5. The 34th Regiment (Pioneers) will be armed, equipped, and clothed in the same manner as the 23rd and 32nd Regiments (Pioneers). Further orders will be issued for the assimilation of these regiments in the above respects.

6. As regards the uniform and equipment of the 35th, 36th, and 37th Regiments, orders will be issued hereafter.

The Goorkha Battalion will form the 2nd Battalion of the 3rd Goorkha Regiment.

7. Orders will be issued hereafter regarding the recruitment of the 2nd Battalion, 3rd Goorkha Regiment. All enlistments will be for the first and second battalions of the regiment, and each recruit, at the time of enlistment, should be made to understand that he is liable to transfer, in the event of war, to either of the two battalions for which he enlists.

8. The squadron of cavalry will form the third squadron of the cavalry of the Queen's Own Corps of Guides.

(signed) *E. H. H. Collen*, Lieut. Colonel,
Officiating Secretary to the Government of India.

— No. 100. —

(Applicable to the Bengal Presidency only.)

INDIA ARMY CIRCULAR, 1887.

(Clause 62.)

Government of India, Military Department,
Simla, 28 April 1887.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor-General in Council :—

Organisation.—Native Army.

Revision of the Establishment of the Cavalry of the Corps of Guides, Punjab Frontier Force.

WITH the sanction of Her Majesty's Government, the establishment of the cavalry of the Corps of Guides, Punjab Frontier Force, is revised and organised in three squadrons as follows, with effect from 1st April 1887 :—

British:	
Squadron commanders, including commandant of cavalry	3
Squadron officers	3
Total	6
Native:	
Ressaldars	3
Ressaidars	3
Woordie-major (Ressaidar)	1
Jemadars	6
Kote-duffadars	6
Duffadars	42
Trumpeters	6
Sowars (including 8 camel sowars)	402
Total	469

(signed) *E. H. H. Collen*,
Officiating Secretary to the Government of India.

— No. 101. —

(Applicable to the Bengal Presidency only.)

INDIA ARMY CIRCULAR, 1887.

(Clause 99.)

Government of India, Military Department,
Simla, 2 June 1887.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council :

Organisation.—Native Army.

Entertainment of Supernumeraries in regiments of Bengal and Punjab Infantry.

IT is notified that the authority given in clause 98, India Army Circulars of 1885, to officers commanding regiments of Native Infantry (Goorkha and Assam regiments excepted) to entertain supernumeraries to the extent of 20 sepoys per corps in excess of the prescribed establishment, still holds good, and is not affected by the increased establishment laid down for regiments of Bengal and Punjab Infantry, in clause 44, India Army Circulars of 1887.

(signed) *E. H. H. Collen*,
Officiating Secretary to the Government of India.

— No. 102. —

TELEGRAM from Viceroy to Secretary of State, dated 22 February 1887.

MILITARY. Owing to insufficiency of sappers to relieve all companies which must be brought away from Burma, we wish to raise a local company of Burmese, as experiment. This recommended by Commander in Chief as cheapest way of providing skilled labour. Please sanction.

— No. 103. —

TELEGRAM from Secretary of State to the Viceroy, dated 8 March 1887.

YOUR military telegram, local sapper company, Burma. Experiment approved. For the present British officers should be lent from existing corps without replacement.

— No. 104. —

INDIA ARMY CIRCULAR, 1887.

Government of India, Military Department,
Simla, 9 July 1887.

THE following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor-General in Council:—

Organisation.—Native Army.

Formation of a Company of Sappers and Miners in Burma.

1. WITH the sanction of Her Majesty's Government, the Governor General in Council directs the raising of one company of sappers and miners in Burma.

2. The company will be designated "The Burma Sappers and Miners," and will be affiliated to the Queen's Own Corps of Madras Sappers and Miners. Its establishment will be as laid down in Appendix A.; and it will be organised, paid, clothed, and equipped in all respects as a service company of the Madras Corps, except as hereinafter provided.

3. The officers of Royal Engineers will be lent from the three corps of sappers and miners in rotation, and will not be replaced in their respective corps. They will be relieved, should they desire it, on completing two years' service in Burma. The staff pay of the company commander will be 340 rupees per mensem, and that of the company officer (or officers), 212 rupees per mensem. The company commander will also receive an office allowance of 30 rupees per mensem, in addition to the contract allowance of 35 rupees, referred to in paragraph 16 of clause 174, Army Circulars of 1885.

4. The establishment of British non-commissioned officers will form part of, and be an augmentation to, the establishment of that class in the Madras Sappers and Miners; and, except as herein specially provided, these men will be on exactly the same footing as the other British non-commissioned officers of that corps.

5. Their engineer pay will be regulated as follows:

The senior non-commissioned officer will receive engineer pay under India Army Circulars, clause 148 of 1886, Article 1595 (*a*) 2nd, with an addition of one shilling for each day he is present and effective in Burma.

The other two non-commissioned officers will receive engineer pay as laid down for non-commissioned officers mentioned in Article 1595 (*c*) of the above-named circular, but with the addition, in the case of each man, of 8 *d.* for each day he is present and effective in Burma, provided that either or both of these men, if on the "A" corps rating, shall be dealt with under Article 1595 (*d*) of the above-named circular with an addition, in the case of each individual, of 10 *d.* for each day he is present and effective in Burma.

6. The issue of the rates of engineer pay above detailed will be irrespective of all Burmese language tests.

7. Subject to the exigencies of the service, no British non-commissioned officer will be required to serve more than two years with the Burma Sappers and Miners.

8. The British non-commissioned officers first appointed to the new company will be selected from the Bengal Sappers and Miners (in which corps there is a surplus of that class) under the orders of His Excellency the Commander in Chief in India, and will be transferred in due course from the Bengal to the Madras establishment.

9. The native officers will be drawn from the Madras Sappers and Miners, and may be selected from the ranks next below those in which they are to serve in the Burma company. They will receive rates of working pay 50 per cent. in excess of those they may be entitled to in India, such enhanced rates being paid them for every day they are present and effective in Burma.

10. Such of the native non-commissioned officers as are transferred from the Madras Corps may similarly be selected from the ranks next below those in which they are appointed to the new company, and will receive working pay for every day they are present and effective in Burma, at rates 50 per cent. in excess of those to which they may be entitled in India. Native officers and non-commissioned officers transferred to the Burma Sappers and Miners will be seconded in their corps; in the event of their electing to return thereto, they will remain supernumerary to its establishment until absorbed.

11. Native commissioned and non commissioned officers will be eligible for promotion in their own corps while thus seconded or supernumerary, and in case of such promotion, each individual will be borne as seconded in the higher grade, in which also he will join his corps on reversion, remaining a supernumerary until his absorption on the occurrence of a vacancy. The vacancies in the Burma Sappers and Miners caused by the reversion of native officers and non-commissioned officers will, as a rule, be filled by promotions within the Burma Company, but the Government of Madras can authorise the Commander in Chief in Madras to sanction further transfers in their place, under the same conditions, from the Madras Corps.

12. The sappers of the company willl consist of one-half Burmans, one-quarter Shans, and one-quarter Kachins and Karens, and all the soldiers enlisted should be fairly skilled artificers.

13. They will receive the same rates of working pay as those allowed to the Sapper artificers of the Bengal Corps.

14. The Sappers will be enlisted for five years, on the expiration of which they will be entitled to claim their discharge. After seven years' approved service their regimental pay will be increased by 1 rupee per mensem, and after 12 years' approved service by 2 rupees per mensem; these increments being in addition to all other emoluments, and being granted under the orders of His Excellency the Commander in Chief in Madras. No pension will be granted to sappers on discharge, but the native officers and non-commissioned officers, whether transferred from India or enlisted in Burma, will receive pensions calculated according to the system in force in the Madras Corps.

15. The native officers, non-commissioned officers and men, will draw free rations when they are granted to the other troops with which they may be serving.

(signed) *E H. H. Collen,*
Officiating Secretary to the Government of India.

APPENDIX A.

DETAILED STATEMENT of the Establishment of the proposed Company of Burma Sappers and Miners.

DETAIL.	Numbers.	REMARKS.
Company Commander - - - - - -	1	
Company Officer - - - - - - -	1	
Total - - -	2	
Company Sergeant Major - - - -	1	
Sergeant - - - - - - - -	1	
Corporal - - - - - - - -	1	
Total - - -	3	
Subadar - - - - - - - - -	1	
Jemadars - - - - - - - -	2	
Havildars - - - - - - - -	6	
Naiks - - - - - - - - -	10	
Sappers - - - - - - - - -	150	
Buglers - - - - - - - - -	2	
Total Native Fighting Ranks - - -	171	
GRAND TOTAL - - -	176	
Followers.		
Lascar - - - - - - - - -	1	
Bhisties - - - - - - - -	2	
Sweepers - - - - - - - -	2	
Cooks - - - - - - - - -	4	To be employed only if necessary.
Extra Bhisties - - - - - - -	2	To be employed only if necessary.
Total Followers - - -	11	

— No. 105 —

(Applicable to the Bengal Presidency only.)

INDIA ARMY CIRCULAR, 1887.

Government of India, Military Department,
Simla, 19 July 1887.

The following Regulations and Instructions are promulgated by direction of the Right Honourable the Governor General in Council:—

Organisation.—Native Army.

ENTERTAINMENT of Supernumeraries in Goorkha and Assam Regiments.

IN modification of Special India Army Circular, dated the 2nd June 1887, it is hereby notified that the authority given in clause 98, India Army Circulars of 1885, to officers commanding regiments of Native Infantry to entertain supernumeraries to the extent of 20 sepoys per corps in excess of the authorised establishment, is extended to the Goorkha and Assam Regiments.

(signed) *E. H. H. Collen,*
Officiating Secretary to the Government of India.

— No. 106. —

INDIA ARMY CIRCULAR, 30 September 1887.

(Clause 152.)

Organisation.—Native Army.

CHANGES in the Conditions of Service of the Native Armies in India.

THE Governor General in Council directs that the following corrections be made in clause 170,* India Army Circulars, 1886:—

* *See* page 127.

Para. 2—Is reconstructed as follows:—

"All enlistments in any battalion, after the 30th November 1886, will be "made for both or for all three battalions, that is to say, a recruit enlisted for "one battalion of a regiment, or group of linked battalions, will be liable to "serve in the other battalions, and will be transferred thereto if required, when-"ever the Government of India may consider it necessary to make preparations "for active service. Beyond this liability to transfer to a linked battalion "during preparations for war, the conditions of the sepoy's enlistment will "remain as at present."

Para. 3, line 3.—For the words "ordered on service" substitute "selected for active service."

— No. 107. —

ABSTRACT RETURN showing the former and the present Sanctioned Establishments of the Army in *India*, for the Years 1884-85 and 1886-87.

BRITISH TROOPS (ALL INDIA).

ROYAL ARTILLERY.

FORMER ESTABLISHMENT, 1884–85.		PRESENT SANCTIONED ESTABLISHMENT, 1886–87.	
10 Batteries of Horse Artillery:		11 Batteries of Horse Artillery:	
Bengal - - - 7		Bengal - - - 7	
Madras - - - 2		Madras - - - 2	
Bombay - - - 1		Bombay - - - 2	
Officers - - - - - - - - 5		Officers - - - - - - - - 5	
Non-commissioned officers, &c. - - 27		Non-commissioned officers, &c. - - 27	
Gunners - - - - - - - 76		Gunners - - - - - - - 76	
Drivers - - - - - - - - 54		Drivers - - - - - - - - 54	
162		162	
Total - - -	1,620	Total - - -	1,782
		[*Note.*—Each horse battery has a native establishment of 7]; all ranks.]	
40 Field Batteries:		42 Field Batteries:	
Bengal - - - 21		Bengal - - - 21	
Madras - - - 8		Madras - - - 10	
Bombay - - - 11		Bombay - - - 11	
Officers - - - - - - - - 5		Officers - - - - - - - - 5	
Non-commisioned officers, &c. - - 27		Non-commissioned officers, &c. - - 27	
Gunners - - - - - - - 76		Gunners - - - - - - - 76	
Drivers - - - - - - - - 54		Drivers - - - - - - - - 54	
162		162	
Total - - -	6,480	Total - - -	6,804
		[*Note.*—Each field battery has a native establishment of 8; all ranks.]	
4 Heavy Field Batteries:		4 Heavy Field Batteries:	
Bengal - - - 2		Bengal - - - 2	
Madras - - - 1		Madras - - - 1	
Bombay - - - 1		Bombay - - - 1	
Officers - - - - - - - - 5		Officers - - - - - - - - 5	
Non-commissioned officers, &c. - - 25		Non-commissioned officers, &c. - - 25	
Gunners - - - - - - - 70		Gunners - - - - - - - 70	
100		100	
Total - - -	400	Total - - -	400
6 Mountain Batteries.		8 Mountain Batteries:	
Bengal - - - 4		Bengal - - - 6	
Madras - - - 1		Madras - - - 1	
Bombay - - - 1		Bombay - - - 1	
Officers - - - - - - - - 5		Officers - - - - - - - - 5	
Non-commissioned officers, &c. - - 24		Non-commissioned officers, &c. - - 24	
Gunners - - - - - - - 82		Gunners - - - - - - - 82	
111		111	
Total - - -	666	Total - - -	888
[*Note.*—Each mountain battery has a native establishment of 149; all ranks.]		[*Note.*—Each mountain battery has a native establishment of 149; all ranks.]	
17 Garrison Batteries:		23 Garrison Batteries:	
Bengal - - - 8		Bengal - - - 11	
Madras - - - 4		Madras - - - 4	
Bombay - - - 5		Bombay - - - 8	
Officers - - - - - - - - 5		Officers - - - - - - - - 5	
Non-commissioned officers, &c. - - 18		Non-commissioned officers, &c. - - 18	
Gunners - - - - - - - 97		Gunners - - - - - - - 97	
120		120	
Total - - -	2,040	Total - - -	2,760

BRITISH CAVALRY (ALL INDIA).

Former Establishment, 1884–85.		Present Sanctioned Establishment, 1886–87.	
9 Regiments of 6 Troops each:		9 Regiments of 8 Troops each:	
Bengal - - - 6		Bengal - - - 6	
Madras - - - 2		Madras - - - 2	
Bombay - - - 1		Bombay - - - 1	
Officers - - - - - - - 24		Officers - - - - - - 29	
Non-commissioned officers, &c. - - 70		Non-commissioned officers, &c. - - 90	
Privates - - - - - - 384		Privates - - - - - 512	
478		631	
Total - - -	4,302	Total - - -	5,679

BRITISH INFANTRY (ALL INDIA).

Former Establishment, 1884–85.		Present Sanctioned Establishment, 1886–87.	
50 Battalions of 8 Companies:		53 Battalions of 8 Companies:	
Bengal - - - 32		Bengal - - - 33	
Madras - - - 9		Madras - - - 11	
Bombay - - - 9		Bombay - - - 9	
Officers - - - - - - - 29		Officers - - - - - - 29	
Non-commissioned officers, &c. - - 104		Non-commissioned officers, &c. - - 104	
Privates - - - - - - 780		Privates - - - - - 880	
913		1,013	
Total - - -	45,650	Total - - -	53,689

NATIVE ARMY, BENGAL.

Artillery.

Former Establishment, 1884–85.		Present Sanctioned Establishment, 1886–87.	
4 Mountain Batteries (4 Guns each):		6 Mountain Batteries (6 Guns each):	
British officers - - - - - 3		British officers - - - - - 4	
Native officers - - - - - 2		Native officers - - - - - 3	
Non-commissioned officers, &c. - - 12		Non-commissioned officers, &c. - - 16	
Gunners - - - - - - 60		Gunners - - - - - - 80	
77		102	
Drivers establishment - - - - 92		Drivers establishment - - - - 123	
169		226	
Total - - -	676	Total - - -	1,356
1 Garrison Battery:		1 Garrison Battery:	
British officer - - - - - 1		British officer - - - - - 1	
Native officers - - - - - 2		Native officers - - - - - 2	
Non-commissioned officers, &c. - - 13		Non-commissioned officers, &c. - - 13	
Gunners - - - - - - 60		Gunners - - - - - - 60	
76		76	
Total - - -	76	Total - - -	76

Sappers and Miners.

Former Establishment, 1884–85.		Present Sanctioned Establishment, 1886–87.	
10 Companies:		8 Companies:	
British officers - - - - - 10		British officers - - - - - 21	
British non-commissioned officers - - 63		British non-commissioned officers - - 43	
Native officers - - - - - 20		Native officers - - - - - 24	
Native non-commissioned officers, &c. - 140		Native non-commissioned officers, &c. - 128	
Privates - - - - - - 1,000		Privates - - - - - - 1,200	
1,233		1,416	
Total - - -	1,233	Total - - -	1,416

NATIVE ARMY, BENGAL—*continued.*

CAVALRY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
Governor General's Body Guard :			Governor General's Body Guard :		
British officers	2		British officers	2	
Native officers	3		Native officers	3	
Non-commissioned officers, &c.	19		Non-commissioned officers, &c.	19	
Troopers	98		Troopers	98	
	122			122	
Total		122	Total		122
21 Regiments of 6 Troops :			23 Regiments of 8 Troops :		
British officers	9		British officers	10	
Native officers	13		Native officers	17	
Non-commissioned officers, &c.	67		Non-commissioned officers, &c.	81	
Sowars	454		Sowars	519	
Camel Sowars	6		Camel Sowars	8	
	559			635	
Total		11,739	Total		14,605
Guide Corps, 4 Troops :			Guide Corps, 6 Troops :		
British officers	3		British officers	4	
Native officers	9		Native officers	13	
Non-commissioned officers, &c.	40		Non-commissioned officers, &c.	60	
Sowars	280		Sowars	420	
Camel Sowars	8		Camel Sowars	12	
	340			509	
Total		340	Total		509
Central India Horse, 2 Regiments of 6 Troops :			Central India Horse, 2 Regiments of 8 Troops :		
British officers	7		British officers	8	
Native officers	13		Native officers	17	
Non-commissioned officers, &c.	60		Non-commissioned officers, &c.	72	
Sowars	408		Sowars	520	
Camel Sowars	12		Camel Sowars	16	
	500			633	
Total		1,000	Total		1,266
Deolee Cavalry, 2 Troops :			Deolee Cavalry, 2 Troops :		
British officer	1		British officer	1	
Native officers	5		Native officers	5	
Non-commissioned officers, &c.	20		Non-commissioned officers, &c.	20	
Sowars	137		Sowars	137	
Camel Sowars	3		Camel Sowars	3	
	166			166	
Total		166	Total		166
Erinpoora Cavalry, 2 Troops :			Erinpoora Cavalry, 2 Troops :		
British officer	1		British officer	1	
Native officers	5		Native officers	5	
Non-commissioned officers, &c.	20		Non-commissioned officers, &c.	20	
Sowars	137		Sowars	137	
Camel Sowars	3		Camel Sowars	3	
	166			166	
Total		166	Total		166

NATIVE ARMY, BENGAL—*continued.*

INFANTRY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
54 Battalions of 8 Companies:			*63 Battalions of 8 Companies (5 additional Goorkha and 4 additional Sikh Battalions):		Battalions
British officers	9		British officers	9	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	720		Sepoys	800	
	841			921	
Total		45,414	Total		58,023
Guide Corps (8 Companies):			Guide Corps (8 Companies):		
British officers	10		British officers	10	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	720		Sepoys	800	
	842			922	
Total		842	Total		922
			Note.—Regimental reserves for the regular Bengal infantry, including the Guide Corps, are in progress of formation, to consist of 218 men per battalion.		
Deolee Infantry (8 Companies):			Deolee Infantry (8 Companies):		
British officers	3		British officers	3	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	600		Sepoys	600	
	715			715	
Total		715	Total		715
Erinpoora Infantry (8 Companies):			Erinpoora Infantry (8 Companies):		
British officers	3		British officers	3	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	600		Sepoys	600	
	715			715	
Total		715	Total		715
Malwa Bheel Corps (8 Companies):			Malwa Bheel Corps (8 Companies):		
British officers	3		British officers	3	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	500		Sepoys	500	
	615			615	
Total		615	Total		615
Meywar Bheel Corps (8 Companies):			Meywar Bheel Corps (8 Companies):		
British officers	5		British officers	5	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	600		Sepoys	600	
	717			717	
Total		717	Total		717

NATIVE ARMY, BENGAL—*continued.*

INFANTRY—*continued.*

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
Bhopal Battalion (10 Companies):			Bhopal Battalion (10 Companies):		
British officers	5		British officers	5	
Native officers	20		Native officers	20	
Non-commissioned officers, &c.	120		Non-commissioned officers, &c.	120	
Sepoys	800		Sepoys	800	
	945			945	
Total		945	Total		945
Nepaul Escort (1 Company):			Nepaul Escort (1 Company):		
British officer	1		British officer	1	
Native officers	2		Native officers	2	
Non-commissioned officers, &c.	13		Non-commissioned officers, &c.	13	
Sepoys	80		Sepoys	80	
	96			96	
Total		96	Total		96

NATIVE ARMY, MADRAS.

SAPPERS AND MINERS.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
(10 Companies):			(8 Companies):		
British officers	14		British officers	21	
British non-commissioned officers	32		British non-commissioned officers	43	
Native officers	20		Native officers	24	
Non-commissioned officers, &c.	141		Non-commissioned officers, &c.	128	
Privates	1,050		Privates	1,200	
	1,257			1,416	
Total		1,257	Total		1,416

ote.—In addition to the above there were attached to the corps 56 recruit boys, and a native recruit establishment of six non-commissioned officers and 94 privates.

Note.—Fifty-six recruit boys are also borne on the strength of the corps.

CAVALRY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
Governor's Body Guard:			Governor's Body Guard:		
British officers	3		British officers	3	
British non-commissioned officer	1		British non-commissioned officer	1	
Native non-commissioned officers	3		Native non-commissioned officers	3	
	7			7	
Total		7	Total		7

Note.—The native officers and men of the Body Guard, 127 in number, are temporarily withdrawn from the regiments of Madras cavalry. As they continue to be borne on the strength of their regiments, and are not extra to that strength, they are not shown on the establishment of the Body Guard.

4 Regiments of 6 Troops:			4 Regiments of 6 Troops:		
British officers	9		British officers	9	
Native officers	12		Native officers	12	
Non-commissioned officers, &c.	72		Non-commissioned officers, &c.	78	
Privates	300		Privates	396	
	393			495	
Total		1,572	Total		1,980

Note.—Forty recruit boys are also borne on the strength of each regiment of Madras cavalry.

Note.—Forty recruit boys are also borne on the strength of each regiment of Madras cavalry.

NATIVE ARMY, MADRAS—*continued.*

INFANTRY.

FORMER ESTABLISHMENT, 1884-85.			PRESENT SANCTIONED ESTABLISHMENT, 1886-87.		
32 Battalions of 8 Companies:			32 Battalions of 8 Companies:		
British officers	9		British officers	9	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	97		Non-commissioned officers, &c.	97	
Sepoys	720		Sepoys	720	
	842			842	
Total		26,944	Total		26,944
Note.—Fifty-six recruit boys are also borne on the strength of each regiment of Madras infantry.			*Note.*—Fifty-six recruit boys are also borne on the strength of each regiment of Madras infantry. Regimental reserves are in progress of formation, to consist of 160 men per battalion.		

NATIVE ARMY, BOMBAY.

ARTILLERY.

FORMER ESTABLISHMENT, 1884-85.			PRESENT SANCTIONED ESTABLISHMENT, 1886-87.		
2 Mountain Batteries (4 Guns):			2 Mountain Batteries (6 Guns):		
British officers	3		British officers	4	
Native officers	2		Native officers	3	
Non-commissioned officers, &c.	12		Non-commissioned officers, &c.	16	
Gunners	60		Gunners	80	
	77			103	
Drivers establishment	92		Drivers establishment	123	
	169			226	
Total		338	Total		452

SAPPERS AND MINERS.

FORMER ESTABLISHMENT, 1884-85.			PRESENT SANCTIONED ESTABLISHMENT, 1886-87.		
(5 Companies:)			(5 Companies:)		
British officers	11		British officers	14	
British non-commissioned officers	16		British non-commissioned officers	38	
Native officers	10		Native officers	15	
Non-commissioned officers, &c.	70		Non-commissioned officers, &c.	80	
Privates	400		Privates	750	
	507			897	
Total		507	Total		897
Note.—Twelve boys are also borne on the strength of the corps.			*Note.*—Twelve boys are also borne on the strength of the corps.		

NATIVE ARMY, BOMBAY—*continued.*

CAVALRY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
Governor's Body Guard:			*Governor's Body Guard:*		
British officer	1		British officer	1	
Native officers	3		Native officers	3	
Non-commissioned officers, &c.	8		Non-commissioned officers, &c.	8	
Sowars	60		Sowars	60	
	72			72	
Total		72	Total		72
6 Regiments of 6 Troops:			*7 Regiments of 8 Troops:*		
British officers	9		British officers	10	
Native officers	13		Native officers	17	
Non-commissioned officers, &c.	74		Non-commissioned officers	90	
Sowars	457		Sowars	510	
Camel sowars	6		Camel sowars	8	
	559			635	
Total		3,354	Total		4,445
Aden Troop:			*Aden Troop:*		
British officer	1		British officer	1	
Native officers	3		Native officers	3	
Non-commissioned officers, &c.	14		Non-commissioned officers, &c.	14	
Sowars	83		Sowars	83	
	101			101	
Total		101	Total		101

INFANTRY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
26 Battalions of 8 Companies:			*26 Battalions of 8 Companies:*		
British officers	9		British officers	9	
Native officers	16		Native officers	16	
Non-commissioned officers, &c.	96		Non-commissioned officers, &c.	96	
Sepoys	720		Sepoys	720	
	841			841	
Total		21,866	Total		21,866

Note.—Twenty-four boys are also borne on the strength of each battalion of Bombay infantry.

Note.—Twenty-four boys are also borne on the strength of each battalion of Bombay infantry.
Regimental reserves are in progress of formation, to consist of 160 men per battalion.

HYDERABAD CONTINGENT.

ARTILLERY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
4 Field Batteries (4 Guns):			4 Field Batteries (4 Guns):		
British officers	2		British officers	2	
Native officers	2		Native officers	2	
Non-commissioned officers, &c.	14		Non-commissioned officers, &c.	14	
Gunners	56		Gunners	56	
Drivers	58		Drivers	58	
	132			132	
Total		528	Total		528

CAVALRY.

FORMER ESTABLISHMENT, 1884–85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
4 Regiments:			4 Regiments:		
British officers	5		British officers	5	
Native officers	14		Native officers	14	
Non-commissioned officers, &c.	59		Non-commissioned officers, &c.	59	
Sowars	478		Sowars	478	
	556			556	
Total		2,224	Total		2,224

INFANTRY.

FORMER ESTABLISHMENT, 1884-85.			PRESENT SANCTIONED ESTABLISHMENT, 1886–87.		
6 Regiments:			6 Regiments:		
British officers	5		British officers	5	
Native officers	17		Native officers	17	
Non-commissioned officers, &c.	102		Non-commissioned officers, &c.	102	
Sepoys	732		Sepoys	732	
	856			856	
Total		5,136	Total		5,136

SUMMARY.

BRITISH TROOPS (ALL INDIA).

Former Establishment, 1884–85.	All Ranks.		Present Sanctioned Establishment, 1886–87.	All Ranks.	
Royal Artillery:			Royal Artillery:		
Horse	1,620		Horse	1,782	
Field	6,480		Field	6,804	
Heavy Field	400		Heavy Field	400	
Mountain	666		Mountain	888	
Garrison	2,040		Garrison	2,760	
Cavalry	4,302		Cavalry	5,679	
Infantry	45,650		Infantry	53,689	
Total		61,158	Total		72,002

NATIVE TROOPS, BENGAL.

Former Establishment, 1884–85.	All Ranks.		Present Sanctioned Establishment, 1886–87.	All Ranks.	
Artillery:			Artillery:		
Mountain	676		Mountain	1,356	
Garrison	76		Garrison	76	
Sappers and Miners	1,233		Sappers and Miners	1,416	
Cavalry	13,533		Cavalry	16,834	
Infantry	50,059		Infantry	62,748	
Total		65,577	Total		82,430

NATIVE TROOPS, MADRAS.

Former Establishment, 1884–85.	All Ranks.		Present Sanctioned Establishment, 1886–87.	All Ranks.	
Sappers and Miners	1,257		Sappers and Miners	1,416	
Cavalry	1,579		Cavalry	1,987	
Infantry	26,944		Infantry	26,944	
Total		29,780	Total		30,347

NATIVE TROOPS, BOMBAY.

Former Establishment, 1884–85.	All Ranks.		Present Sanctioned Establishment, 1886–87.	All Ranks.	
Artillery:			Artillery:		
Mountain	338		Mountain	452	
Sappers and Miners	507		Sappers and Miners	897	
Cavalry	3,527		Cavalry	4,618	
Infantry	21,866		Infantry	21,866	
Total		26,238	Total		27,833

HYDERABAD CONTINGENT.

Former Establishment, 1884–85.	All Ranks.		Present Sanctioned Establishment, 1886–87.	All Ranks.	
Artillery	528		Artillery	528	
Cavalry	2,224		Cavalry	2,224	
Infantry	5,136		Infantry	5,136	
Total		7,888	Total		7,888
Grand Total		190,641	Grand Total		220,500

India Office, 24 March 1887.

Allen Johnson, Lieutenant General,
Military Secretary.

REPORT

FROM THE

SELECT COMMITTEE

ON

FORESTRY;

TOGETHER WITH THE

PROCEEDINGS OF THE COMMITTEE,

MINUTES OF EVIDENCE,

AND APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
3 *August* 1887.

LONDON:
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and 32, Abingdon-street, Westminster, S.W.;
ADAM and CHARLES BLACK, North Bridge, Edinburgh;
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BOMBAY BRANCH
OF THE
Royal Asiatic Society.
CLASS

REPORT

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SELECT COMMITTEE

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FORESTRY;

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246.

Ordered,—[*Monday*, 16*th May* 1887]:—THAT a Select Committee be appointed to consider whether, by the establishment of a Forest School, or otherwise, our Woodlands could be rendered more remunerative.

THAT the Committee do consist of Eighteen Members.

THAT the Committee have power to send for Persons, Papers, and Records.

THAT the Minutes of Evidence taken before the Select Committee on Forestry, in the Sessions 1885-86, be referred to the Committee.

Committee nominated—[*Friday*, 20*th May* 1887]—of—

Mr. C. Acland.
Mr. Biddulph.
Mr. Craig Sellar.
Mr. Evelyn.
Dr. Farquharson.
Mr. Farquharson.
Mr. Munro Ferguson.
Mr. Fuller Maitland.
Mr. Gilhooly.
Mr. Egerton Hubbard.
Colonel King-Harman.
Sir Edmund Lechmere.
Sir John Lubbock.
Colonel Nolan.
Mr. Rankin.
Mr. Mark Stewart.
Sir Richard Temple.

Ordered,—[*Monday*, 23*rd May* 1887]:—THAT Five be the Quorum of the Committee.

Ordered,—[*Monday*, 13*th June* 1887]:—THAT Viscount Ebrington be added to the Committee.

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REPORT.

THE SELECT COMMITTEE appointed to consider whether, by the Establishment of a FOREST SCHOOL, or otherwise, our WOODLANDS could be rendered more remunerative;——HAVE considered the matters to them referred, and have agreed to the following REPORT:—

THE Committee was first appointed in 1885 for the purpose of considering "whether, by the establishment of a Forest School, or otherwise, our woodlands could be rendered more remunerative." The Committee was re-appointed in 1886, when, in consequence of the general election, it had not time to complete its inquiry, and recommended that it should be re-appointed in the present Session.

The Committee has received evidence from persons representing various professions, occupations, and interests, connected with woodlands and forest management in England, as well as in Scotland and Ireland, and has especially directed its attention to the following points:

(1.) How far there is need of some means of giving instruction to those engaged in the cultivation and management of woodlands.

(2.) How far the establishment of a school or schools of forestry would meet such need.

(3.) Whether a board of persons, representing various interests and associations connected with agriculture, arboriculture, and silviculture, should be formed with the assistance of Parliament, for the purpose of examination, granting certificates and generally promoting the improvement of our woodlands.

(4.) Whether by either or both of such means the cultivation of woodlands could be made more remunerative.

The woodlands belonging to the State are comparatively small, though even, as regards them, the difference between skilled and unskilled management would itself more than repay the cost of a forest school. The woodlands in private hands, however, are far more considerable, and the total area of woodlands, amounts, according to the agricultural accounts, to 2,788,000 acres, viz.:—

England - - - -	1,466,000 acres.
Wales - - - - -	163,000 „
Scotland - - - -	829,000 „
Ireland - - - -	330,000 „

Moreover, strong evidence has been given before your Committee that large tracts of land in the United Kingdom, especially in Scotland and Ireland, might be planted with advantage. The forests in India and the Colonies must also be taken into consideration, and on the whole, the forest area in the British Empire is greater than that belonging to any other country. Your Committee are satisfied that, so far as Great Britain and Ireland are concerned, the management of our woodlands might be materially improved. Moreover, the present depressed values render economical and skilful management even more

important than if the range of prices were higher, though it is probable that, with the waste of forests elsewhere, a brighter future is in store for home forestry, and that some considerable proportion of the timber now imported, to the value of 16,000,000 *l.*, might, under more skilful management, be raised at home.

Nearly every other civilised State possesses one or more forest schools. In this country, on the contrary, no organised system of forestry instruction is in existence excepting in connection with the Indian service.

The Witnesses examined before the Committee have been generally and strongly of opinion that the establishment of forest schools, or at any rate of some organised system of forest instruction, would be very desirable; but they have differed considerably as to the best mode in which this might be effected. There is a general agreement that the establishment of a Forest Board would be a wise step.

As regards the formation of a forest school, more than one centre of instruction would be desirable; though in the first instance it might be well to establish one school only, in order to secure the most complete equipment, the best teachers, and a sufficiency of students. The Indian forest students might constitute a nucleus. The Indian Government is already at some expense on their behalf, and it is probable that the fees from other students would nearly if not altogether repay any additional expense which their admission would entail. This school would doubtless be situated in England, but a school for Scotland is also urgently needed, and your Committee are of opinion that it would probably be desirable to found another in Ireland.

Sir Alexander Taylor, President of the Royal Indian Engineering College at Cooper's Hill, considers, however, that a separate course would be required if English students are to be admitted, and your Committee are not informed whether the Indian Government would be prepared to organise such course.

As regards Great Britain and Ireland, the demand would be principally for instruction adapted to the needs of land agents, foresters, and wood-reeves; and your Committee have it in evidence that they might profitably receive instruction together with those studying the higher branches of forestry for Home, the Indian and Colonial Service, who would carry their studies further. Even as regards ordinary woodmen, your Committee consider that a certain amount of simple and practical instruction would be very useful.

It has been stated to your Committee that the authorities of other institutions, as, for instance, of the Agricultural Colleges at Cirencester and Downton, would be prepared to organise a system of forest instruction, but the evidence has not been sufficient to enable your Committee to decide on the respective advantages which might be offered by these institutions.

Apart from the question of actual profit derived from tree planting, its importance as an accessary to agriculture is shown by the effects which woods have in affording shelter and improving the climate; and your Committee are of opinion that, whilst on public and national grounds timber cultivation on a more scientific system should be encouraged, landowners might make their woods more remunerative were greater attention paid to the selection of trees suitable to different soils and to more skilful management after the trees are planted.

Your Committee have had evidence that, apart from any immediate pecuniary benefits, there would be considerable social and economical advantages in an extensive system of planting in many parts of the kingdom, especially on the west side of Ireland and in the Highlands of Scotland. This subject is one of great importance and well worthy of early consideration.

Your Committee also think it right to call attention to the present unsatisfactory condition of the New Forest. Mr. Lascelles, the deputy surveyor, has

has expressed himself strongly on this question, and attributes it to the Act of 1877. "There are to be seen by the student of forestry," he says, "over 40,000 acres of waste land lying idle and worthless. But by Clause 5 of the Act of 1877 no planting may be done there. He will see several fine plantations of oak, which are not only ripe and mature, but which are going back rapidly, and he will wonder why the crop is not realised and the ground replanted, till he is referred to Clause 6 of the same Act, by which he will see that the ground may not be cleared of the crop. Last, and worst of all, he will see some 4,500 acres of the most beautiful old woods in the country, most of which are dying back and steadily going to wreck and ruin. But here again absolutely nothing can be done. . . . It is sad to see them dying out, when all that is required to preserve them for future generations is to imitate the wisdom of those who made them at first, and by simply protecting, by enclosing them and removing dead trees, leave it to nature to perpetuate them. . . . Those who framed the New Forest Act of 1877 desired to conserve these old woods, but their zeal seems to have carried them so far as to defeat the object they had in view; and I cannot but think that had forestry been a science commonly taught in the past, as I trust it may be in the future, owing to the result of this inquiry, no such clause could ever have found a place in an Act of Parliament dealing with woodlands." The object of the Act of 1877, no doubt, was that the forest should be maintained in a state of natural beauty; and as the effect now appears to be to defeat this very object, the present condition of the forest demands the serious attention of the Government.

Your Committee recommend the establishment of a forest board. They are also satisfied by the evidence that the establishment of forest schools, or at any rate of a course of instruction and examination in forestry, would be desirable, and they think that the consideration of the best mode of carrying this into effect might be one of the functions entrusted to such a forest board.

As regards the Board of Forestry, the Committee submit the following suggestions:—

1. That the Board should be presided over by a responsible official (an expert by preference) appointed by the Government, and reporting annually to some department of the Government.

2. That the Board should be so constituted as to comprise the principal agencies interested in the promotion of a sounder knowledge of forestry, especially the various teaching and examining bodies, as well as the professional societies.

3. That the following Bodies should be invited to send delegates to the Board:

The Royal Agricultural Society of England;
The Highland and Agricultural Society of Scotland;
The Royal Dublin Society;
The Office of Woods and Forests;
The Linnean Society;
The Surveyors' Institution;
The English Arboricultural Society;
The Scottish Arboricultural Society;

and, that the Director of Kew Gardens should be a member *ex officio*.

That the Board should also comprise three Members of each House of Parliament, and a certain number of owners or managers of large woodlands, a preference in the latter case being given to those who are in a position to afford facilities for study in their woods.

4. That the functions of the Board should be—

(*a*) To organise forest schools, or, at any rate, a course of instruction in forestry.

(*b*) To make provision for examinations.

(*c*) To prepare an official syllabus and text-book.

5. That the examiners should be required to examine in the following subjects, namely:—

(*a*) Practical forestry.

(*b*) Botany.

(*c*) Vegetable Physiology and Entomology, especially in connection with diseases and insects affecting the growth of trees.

(*d*) Geology, with special reference to soils.

(*e*) Subjects connected with land agency, such as land drainage, surveying, timber measuring, &c.

The expense of secretarial staff and examiners need not, in the opinion of the Committee, exceed 500 *l.* a year, and the cost might be considerably reduced by fees for diplomas.

The fact that the Indian Government already incurs some expense in promoting the education of Forestry Students for the Indian Service, suggests the adoption of the Royal Indian Engineering College at Cooper's Hill as a nucleus for the proposed forestry instruction.

Inducements might be offered to the agricultural colleges and the Surveyors' Institution to send their students for examination, by a system of exemption from examination in certain preliminary subjects, in respect of which the candidates could produce a certificate of proficiency.

4 *August* 1887.

PROCEEDINGS OF THE COMMITTEE.

Wednesday, 8th June 1887.

MEMBERS PRESENT:

Sir Edmund Lechmere.	Sir Richard Temple.
Mr. Biddulph.	Mr. Egerton Hubbard.
Mr. Fuller Maitland.	Mr. Rankin.
Mr. Evelyn.	Mr. C. Acland.
Mr. Munro Ferguson.	Colonel Nolan.
Dr. Farquharson.	Colonel King-Harman.
Mr. Craig Sellar.	

Sir EDMUND LECHMERE was called to the Chair.

The Committee deliberated.

Mr. *William Barron* and Professor *John Wrightson* were examined.

[Adjourned till Wednesday next, at Twelve o'clock.

Wednesday, 15th June 1887.

MEMBERS PRESENT:

Sir EDMUND LECHMERE in the Chair.

Mr. Biddulph.	Mr. Egerton Hubbard.
Mr. Evelyn.	Sir Richard Temple.
Mr. Munro Ferguson.	Colonel Nolan.
Viscount Ebrington.	Mr. C. Acland.
Dr. Farquharson.	Colonel King-Harman.
Sir John Lubbock.	Mr. Mark Stewart.
Mr. Rankin.	Mr. Farquharson.
Mr. Fuller Maitland.	

The Rev. *J. B. M'Clellan*, the Earl of *Ducie* (attending by permission of the House of Lords), the Earl *Bathurst* (attending by permission of the House of Lords), Mr. *T. J. Elliot*, Sir *James Campbell*, Mr. *H. A. Britten*, and the Hon. *Gerald Lascelles* were examined.

[Adjourned till Tuesday, 28th June, at Twelve o'clock.

Tuesday, 28th June 1887.

MEMBERS PRESENT:

Sir EDMUND LECHMERE in the Chair.

Mr. Egerton Hubbard.	Mr. Craig Sellar.
Mr. Munro Ferguson.	Viscount Ebrington.
Mr. C. Acland.	Mr. Rankin.
Mr. Evelyn.	Mr. Fuller Maitland.
Dr. Farquharson.	Colonel Nolan.
Sir Richard Temple.	

Mr. *John MacGregor*, Mr. *J. Grant Thomson*, Mr. *William MacCorquodale*, and Mr. *Robert Dundas* were examined.

[Adjourned till Wednesday, 6th July, at Twelve o'clock.

Wednesday, 6th July 1887.

MEMBERS PRESENT:

Sir EDMUND LECHMERE in the Chair.

Colonel Nolan.	Mr. Fuller Maitland.
Mr. Biddulph.	Mr. Rankin.
Dr. Farquharson.	Mr. Mark Stewart.
Mr. Egerton Hubbard.	Colonel King-Harman.
Mr. Evelyn.	Sir John Lubbock.

The Rev. *T. E. Flannery* and Mr. *Andrew Gilchrist* were examined.

[Adjourned till Tuesday next, at Twelve o'clock.

Tuesday, 12th July 1887.

MEMBERS PRESENT:

Sir EDMUND LECHMERE in the Chair.

Sir John Lubbock.	Mr. Rankin.
Mr. Fuller Maitland.	Mr. C. Acland.
Mr. Evelyn.	Mr. Egerton Hubbard.
Dr. Farquharson.	Colonel Nolan.

Mr. *John Clutton*, Mr. *Evan Powell*, Sir *Joseph Hooker*, C.B., and the Rev. *John Crumbie Brown*, LL.D., were examined.

[Adjourned till Wednesday next, at Two o'clock.

Wednesday, 20th July 1887.

MEMBERS PRESENT:

Sir EDMUND LECHMERE in the Chair.

Sir John Lubbock.	Mr. C. Acland.
Mr. Munro Ferguson.	Dr. Farquharson.
Mr. Egerton Hubbard.	Mr. Fuller Maitland.
Mr. Rankin.	Mr. Mark Stewart.
Sir Richard Temple.	Viscount Ebrington.
Mr. Biddulph.	Mr. Evelyn.
Colonel Nolan.	

The Right Hon. Viscount *Powerscourt* (attending by permission of the House of Lords), General Sir *Alexander Taylor*, and Sir *Richard Temple* (a Member of the Committee), were examined.

[Adjourned till Wednesday next, at Half-past Two o'clock.

Wednesday, 27th July 1887.

MEMBERS PRESENT:

Sir EDMUND LECHMERE in the Chair.

Sir John Lubbock.	Mr. Egerton Hubbard.
Mr. Evelyn.	Mr. Munro Ferguson.
Viscount Ebrington.	Mr. Fuller Maitland.
Mr. Rankin.	Colonel Nolan.
Dr. Farquharson.	Sir Richard Temple.
Mr. C. Acland.	Mr. Mark Stewart.

DRAFT REPORT proposed by the *Chairman*, read the first time, as follows:—

"**1.** The Committee was first appointed in 1885 for the purpose of considering 'whether, by the establishment of a Forest School, or otherwise, our woodlands could be rendered more remunerative.' The Committee was re-appointed in 1886, when, in consequence of the general election, it had not time to complete its inquiry, and it recommended that it should be re-appointed in the present Session.

"**2.** The Committee has received evidence from persons representing various professions, occupations, and interests, connected with woodlands and forest management in England, as well as in Scotland and Ireland, and has especially directed its attention to the following points:

"(1.) How far there is need of some means of giving instruction to those engaged in the cultivation and management of woodlands.

"(2.) How far the establishment of a school or schools of forestry would meet such need.

"(3.) Whether a board of persons, representing various interests and associations connected with agriculture, arboriculture, and silviculture, should be formed with the assistance of Parliament, for the purpose of examination, granting certificates, and generally promoting the improvement of our woodlands.

"(4.) Whether by either, or both, of such means the cultivation of woodlands could be made more remunerative.

"**3.** The woodlands belonging to the State are comparatively small, though even, as regards them, the difference between skilled and unskilled management would itself more than repay the cost of a forest school. The woodlands in private hands, however, are far more considerable, and the total area of woodlands amounts to over two millions of acres. Moreover, strong evidence has been given before your Committee that large tracts, especially in Scotland and Ireland, might be planted with advantage. The forests in India and the Colonies must also be taken into consideration, and, on the whole, the forest area in the British Empire is probably greater than that belonging to any other country. Your Committee are satisfied that so far as Great Britain is concerned, the management of our woodlands might be materially improved. Moreover, the present depressed values render economical and skilful management even more important than if the range of prices were higher.

"**4.** Nearly every other civilised country possesses one or more forest schools. In this country, on the contrary, no organised system of forestry instruction is in existence, excepting in connection with the Indian service.

"**5.** The Witnesses examined before the Committee have been generally and strongly of opinion that the establishment of a forest school, or at any rate of some organised system of forest instruction, would be very desirable; but they have differed considerably as to the best mode in which this might be effected. There is a general agreement that the establishment of a Forest Board would be a wise step.

"**6.** As regards the formation of a forest school, it is probable that eventually several centres of instruction would be desirable. In the first instance, however, the number of students might probably not be so great as to require more than one school, and it might be best to bring them together, thus securing the most complete equipment and the best teachers. The Indian forest students might constitute the nucleus of such a school. The Indian Government is already at some expense on their behalf, and it is probable that the fees from other students would nearly, if not altogether, repay any additional expense which their admission would entail.

 "**7.** Sir

"**7.** Sir Alexander Taylor, President of the Royal Indian Engineering College at Cooper's Hill, considers, however, that a separate course would be required if English students are to be admitted, and your Committee are not informed whether the Indian Government would be prepared to organise such course.

"**8.** It has been stated to your Committee that the authorities of other institutions, as, for instance, of the Agricultural Colleges at Cirencester and Downton, would be prepared to organise a system of forest instruction, but the evidence has not been sufficient to enable your Committee to decide on the respective advantages which might be offered by these institutions.

"**9.** As regards Great Britain, the demand would be principally for instruction adapted to the needs of land agents, wood-reeves, and woodmen; and your Committee have it in evidence that they might receive instruction together with those studying the higher branches of forestry, and who would carry their studies further.

"**10.** Although the evidence does not appear to show any prospect of large profits being derived from tree planting, except in cases where it is carried out on a very large scale on strict commercial principles, and under practised and scientific supervision, still its importance as an accessary to agriculture is shown by the effects which woods have in affording shelter and improving pasture land, and that, whilst on public and national grounds timber cultivation on a more scientific system should be encouraged, landowners might make their woods at least more remunerative were greater attention paid to the selection of trees suitable to the soil, and by more skilful management after the trees are planted.

"**11.** Your Committeee have had evidence that, apart from the pecuniary benefits to the landlord, there would be considerable social and economical advantages in an extensive system of planting on the west side of Ireland, and the subject is one of great importance; but this aspect of the question did not seem to your Committee to fall within the terms of their reference.

"**12.** Your Committee recommend the establishment of a Forest Board. They are also satisfied by the evidence that the establishment of a forest school, or at any rate of a course of instruction in forestry, would be desirable, and they think that the consideration of the best mode of carrying this into effect might be one of the functions entrusted to such a Forest Board.

"**13.** The Committee submit the following suggestions:—

"SUGGESTIONS FOR A BOARD OF FORESTRY.

"1. The Forestry Board should be presided over by a responsible official (an expert by preference) appointed by the Government, and reporting annually to some department of the Government.

"2. The Board should be so constituted as to comprise the principal agencies presumedly interested in the promotion of a sounder knowledge of forestry, especially the various teaching and examining bodies, as well as the professional societies.

"3. The Board might also comprise three or four Members of both Houses of Parliament, and a certain number of large landowners, selected as being in a position to give facilities for study in their own woods.

"4. In order to prevent the action of the Board from being hampered by rivalries, and also to reduce the cost to a minimum, it might be well if the Board confined itself, at any rate at first, to

(*a*) Making provision for examination in forestry.

(*b*) Providing facilities for study.

(*c*) Suggesting or influencing the general nature of the training by means of an official syllabus and text-book.

(*d*) The consideration of the best mode of organising a course of instruction in forestry.

"5. Examiners would be required, appointed by the Board, to examine in the following subjects:—

(*a*) Practical forestry.

(*b*) Botany.

(*c*) Vegetable physiology and entomology, especially in connection with diseases and insects affecting the growth of trees.

(*d*) Surface geology of soils.

(*e*) Land agency subjects, such as land drainage, surveying, timber measuring, and work in woods.

"**14.** The

"**14.** The expense of secretarial staff and examiners need not, in the opinion of the Committee, exceed 500 *l.* a year, and the expenses might be considerably reduced by fees for diplomas.

"**15.** Inducements should be offered to the agricultural colleges and the Surveyors' Institution to send their students for examination, by a system of exemption from examination in certain preliminary subjects, in respect of which the candidates could produce a certificate of proficiency.

"**16.** The Indian Government already incurs some expense in promoting the education of Indian Forest Students, and this would suggest the idea that the Royal Indian Engineering College at Cooper's Hill might become a nucleus for more extended forestry instruction.

"**17.** The Board might grant certificates to young colonial foresters for theoretical work. Their practical knowledge could only be acquired in the countries in which their services were needed.

"**18.** The following Bodies should be invited to send delegates to the Board:

The Royal Agricultural Society of England;
The Highland and Agricultural Society of Scotland;
The Royal Dublin Society;
The Office of Woods and Forests;
The Linnean Society;
The Director of Kew Gardens;
The Surveyors' Institution;
The English Arboricultural Society;
The Scottish Arboricultural Society;

with certain Members of each House of Parliament."

DRAFT REPORT proposed by the *Chairman*, read a second time, paragraph by paragraph.

Paragraphs 1—2, *agreed to.*

Paragraph 3.—Amendments made.—Another Amendment proposed, in line 7, to leave out the word "probably"—(Mr. *Munro Ferguson*).—Question, That the word "probably" stand part of the paragraph,—put, and *negatived.*

Further consideration of paragraph 3, *postponed.*

Paragraphs 4—5, amended, and *agreed to.*

Paragraph 6.—Amendment made.

Further consideration of paragraph 6, *postponed.*

Paragraphs 7—8, *agreed to.*

Paragraphs 9—12, amended, and *agreed to.*

Amendment proposed, That the following new paragraph be inserted in the Report:—

"Your Committee also think it right to call attention to the present unsatisfactory condition of the New Forest. Mr. Lascelles, the deputy surveyor, has expressed himself strongly on this question, and attributes it to the Act of 1877. 'There are to be seen, by the student of forestry,' he says, 'over 40,000 acres of waste land lying idle and worthless. But by Clause 5 of the Act of 1877 no planting may be done there. He will see several fine plantations of oak, which are not only ripe and mature, but which are going back rapidly, and he will wonder why the crop is not realised and the ground replanted, till he is referred to Clause 6 of the same Act, by which he will see that the ground may not be cleared of the crop. Last, and worst of all, he will see some 4,500 acres of the most beautiful old woods in the country, most of which are dying back and steadily going to wreck and ruin. But here again absolutely nothing can be done. . . . It is sad to see them dying out, when all that is required to preserve them for future generations is to imitate the wisdom of those who made them at first, and by simply protecting, by enclosing them and removing dead trees, leave it to nature to perpetuate them. . . . Those who framed the New Forest Act of 1877 desired to conserve these old woods, but their zeal seems to have carried them so far as to defeat the object they had in view; and I cannot but think that had forestry been a science commonly taught in the past, as I trust it may be in the future, owing to the result of this inquiry, no such clause could ever have found a place in an Act of Parliament dealing with woodlands.' The object of the Act of 1877, no doubt, was that the forest should be maintained in a state of natural beauty; and as the effect

now appears to be to defeat this very object, the present condition of the forest demands the serious attention of the Government"—(Sir *John Lubbock*).—Question, That this paragraph be inserted in the Report,—put, and *agreed to.*

Paragraphs 13—16, amended, and *agreed to.*

Paragraph 17, *disagreed to.*

Paragraph 18, amended, and *agreed to.*

[Adjourned till Wednesday next, at Half-past Two o'clock.

Wednesday, 3rd August 1887.

MEMBERS PRESENT:

Sir John Lubbock.	Sir Richard Temple.
Mr. Munro Ferguson.	Mr. Rankin.
Mr. Evelyn.	Mr. Mark Stewart.
Colonel Nolan.	Viscount Ebrington.

In the absence of Sir EDMUND LECHMERE, Sir JOHN LUBBOCK was called to the Chair.

Postponed paragraph 3, as amended, further considered.—Another Amendment made.—Paragraph, as amended, *agreed to.*

Postponed paragraph 6, as amended, further considered.

Paragraph, as amended, *disagreed to.*

Amendment proposed, That the following new paragraph be inserted in the Report:—"As regards the formation of a forest school, more than one centre of instruction would be desirable; though in the first instance it might be well to establish one school only, in order to secure the most complete equipment, the best teachers, and a sufficiency of students. The Indian forest students might constitute a nucleus. The Indian Government is already at some expense on their behalf, and it is probable that the fees from other students would nearly if not altogether repay any additional expense which their admission would entail. This school would doubtless be situated in England; but a school for Scotland is also urgently needed, and your Committee are of opinion that it would probably be desirable to found another in Ireland"—(Mr. *Munro Ferguson*).—Question, That this paragraph be inserted in the Report,—put, and *agreed to.*

Question, That this Report, as amended, be the Report of the Committee to the House,—put, and *agreed to.*

Ordered, To Report, together with the Minutes of the Evidence, and an Appendix.

EXPENSES OF WITNESSES.

NAME OF WITNESS.	PROFESSION OR CONDITION.	From whence Summoned.	Number of Days Absent from Home, under Orders of Committee.	Allowance during Absence from Home.	Expenses of Journey to London and back.	TOTAL Expenses allowed to Witness.
				£. s. d.	£. s. d.	£. s. d.
Mr. William Barron -	Landscape Gardener -	Borrawash, Derby - -	2	2 2 –	1 18 –	4 – –
Sir James Campbell -	Deputy Surveyor, Dean Forest.	Coleford, Gloucestershire	2	2 2 –	2 4 4	4 6 4
Mr. H. A. Britton -	Timber Valuer, &c. -	Wolverhampton - -	2	2 2 –	2 2 3	4 4 3
Mr. John MacGregor	Forestry Factor - -	Dunkeld - - -	3	3 3 –	6 12 8	9 15 8
Mr. William MacGorquodale.	Forestry Surveyor -	Old Scone, Perth - -	3	3 3 –	6 8 –	9 11 –
Mr. J. Grant Thomson	Forest Manager - -	Grantown, N. B. - -	5	5 5 –	7 15 –	13 – –
The Rev. T. Flannery	Parish Priest - -	Carna Recess, County Galway.	8	8 8 –	11 – –	19 8 –
Mr. Andrew Gilchrist	Forest Manager - -	Powerscourt, Enniskerry, County Wicklow.	3	3 3 –	3 18 –	7 1 –
The Rev. J. B. M'Clellan.	Principal, R. A. College	Cirencester - - -	1	1 1 –	1 9 –	2 10 –
Mr. Evan Powell -	Land Agent - -	Llanidloes, Montgomeryshire.	3	3 3 –	3 7 3	6 10 3
Mr. Thomas John Elliot.	Professor, R. A. College, Cirencester.	Eastnor, Ledbury - -	2	2 2 –	2 5 9	4 7 9
The Rev. J. C. Brown	Doctor of Laws - -	Haddington, N. B. - -	3	3 3 –	5 10 –	8 13 –
		TOTAL - - - £.		38 17 –	54 10 3	93 7 3

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MINUTES OF EVIDENCE.

Wednesday, 8th June 1887.

MEMBERS PRESENT:

Mr. C. Acland.
Mr. Biddulph.
Mr. Evelyn.
Dr. Farquharson.
Mr. Munro Ferguson.
Mr. Egerton Hubbard.
Colonel King-Harman.
Sir Edmund Lechmere.
Mr. Fuller Maitland.
Colonel Nolan.
Mr. Rankin.
Mr. Craig Sellar.
Sir Richard Temple.

SIR EDMUND LECHMERE, BART., IN THE CHAIR.

Mr. WILLIAM BARRON, called in; and Examined.

Chairman.

1. YOU live at Borrowash, Derby?—Yes, at the Elvaston Nurseries.

2. And you have carried on business for a great many years as a nurseryman and landscape gardener?—Yes, after Charles, the fourth Earl of Harrington died. (I laid out his place. I was over 20 years laying that out.) His brother succeeded, and he would not keep the place up, so I arranged to commence my nursery at Elvaston Castle; and after he died I went to Borrowash.

3. Have you had considerable practical experience of the planting and management of woods?—I fancy I have had rather more than most men. I have had 50 years at it.

4. You have had charge of the woods upon two large estates, have you not?—The Earl of Harrington has an estate in Cheshire, called Gawsworth, and I had the management of that for six years, until the Elvaston grounds became so large that I had to give that up.

5. You had charge of the Gawsworth Estate, comprising a considerable area of woodland?—Yes, for the first 20 years I never had less than from 60 to 90 men to manage at Elvaston Castle, and at Gawsworth I kept a woodman.

6. You had charge of the Sennow Estate, had you not?—I had charge of that estate for 13 years; it was in Chancery. I had a regular Scotch woodman there, and a number of labourers under him.

7. You had experience of a very large area of woods there, had you not?—Yes.

Chairman—continued.

8. In what county was the Gawsworth Estate?—Cheshire.

9. That was Lord Harrington's property?—His estate extends close up to Macclesfield.

10. And where is the Sennow Estate?—In Norfolk, from Ryburgh to Fakenham.

11. And you have been professionally consulted as to the planting and management of woods, have you not, in all parts of Great Britain?—Yes, I have.

12. Have you given your attention to the question of the need of more general practical instruction of the persons who have the management and charge of woodlands?—Yes, I have.

13. Have your observations and your experience led you to the conclusion that our woodlands are managed upon the whole scientifically and economically?—It is quite the reverse. Will you allow me for a moment to observe that for a great number of years the nurserymen, those who raise seedlings, used to employ old men and boys to collect the seeds. Now it is a very well-known axiom that trees out of health will produce seeds sooner than healthy trees. These people, however, went to trees of easy access without careful selection, consequently they got a spurious breed altogether. I was the first to raise the seed of a very valuable pine. I might say that the cones came at the top of the tree; the catkins come on the lower branches. I had for the first two years from 10 to 12 per cent. of useless rubbish that would not come to anything; I was very much puzzled about it, and I con-

Chairman—continued.

sulted my friends on the subject. It first struck me that it was something like defective impregnation, because although the pollen from the male catkins was scattered over the cones, yet however still the day might be, I found the current of air carried the pollen on one side; and in the following year, when I had a very fine show at Elvaston Castle, I constructed a small cylinder of pasteboard in which I placed the cones. I went over them three days successively, and fertilised them thoroughly, and the result was that I had 10,000 seedlings and not one defective one; that applies to animal economy the same as to tree culture; the previous failure was due to defective impregnation.

14. Now let me ask you this. Independently of the scientific question that you have just dealt with, of defective impregnation, there is a great deal of defective management through want of instruction, is there not?—Yes; in other words the very finest specimens should be selected to get seed from, whatever the species of tree may be, because if you take seeds from an inferior plant you will be sure to have an inferior breed of tree, the same as with animals.

15. Have you had a great deal of experience with land agents in your various visits to estates?—I have had a great deal of experience in meeting with land agents.

16. Do you think that land agents have a sufficient opportunity of acquiring a knowledge of forestry?—I have not met with many of them who know much about it; they understand farming very well, but I can scarcely name one whom I know who is up in wood management; you must look to the foresters for that.

17. And you think it would be of advantage if land-owners were to have opportunities of obtaining a certain knowledge of forestry and the management of woodlands?—Decidedly so.

18. Have you read the evidence which Colonel Pearson gave before the Committee on Forestry in 1885?—No, I have not read that.

19. I sent you the whole of the evidence of last year and of the year before?—I read a great deal of it, but I do not recollect that particular evidence.

20. Colonel Pearson gave evidence before the Committee as to the best means of giving the requisite instruction?—No doubt a school of forestry is the way to manage that, and it should be under a practical man who understands it.

21. Do you think that a school of forestry would be best as one central national school, or that it should be connected with the existing places of education, such as Downton?—I think a central school for England, one for Scotland, and one for Ireland, would be the best plan, though it is perfectly true that if you had one school in England you would manage to draw efficient men from it for the other countries; but I think it is very important to establish a practical school.

22. Do you think that by improving the education of land agents in forest management we might materially improve our woodlands, and increase the profits derived from them?—Yes; I have been all over England, and I hold the opinion that we have thousands of acres of

Chairman—continued.

woodlands going literally to waste, growing rubbish; it is really a criminal waste.

23. Is that owing to want of skill on the part of those who have to direct their management, or is it the fault of the woodlands?—It appears that the agents do not pay any attention to it, and if the proprietors do not possess a smattering of knowledge of the subject themselves, it goes on from age to age, and nothing is done to improve it.

24. Are you acquainted at all with the Agricultural College at Cirencester?—I have not been there.

25. Do you know Downton?—I have not been to Downton.

26. Are you acquainted with the New Forest, or the Forest of Dean?—I have been in the New Forest in Hampshire.

27. Which forest do you think would be the most suitable for instruction in forestry to the students; the Forest of Dean or the New Forest?—There is a great deal of the New Forest in Hampshire where the land is very inferior. I think it would be a great mistake to establish a school of forestry upon inferior land, because you cannot get good specimens to grow there. The expense upon inferior land is quite as great as upon good land, but you wait a very much longer time, and then you get nothing. It is a very great mistake to plant extensively for forestry upon inferior land.

28. Could such a system of instruction in forestry as has been suggested be carried out sufficiently by lectures, or should it be by practical work?—There ought to be both; the forester ought to know something of arboricultural botany. Take the pine tribe, there is a certain class of the pine tribe which is only two-leaved; they only throw their leaves off the third year; they have only two years' leaves upon them, and if you allow those two years to pass over you cannot make them shoot; but I have found out that in the centre of any two, three, or five-leaved pines there is a dormant bud, and by stopping the shoot you can manage to make as many leaves come out as you like, and that is very desirable, because the leaf of the plant is the lung of the plant, and the amount of sap elaborated is in exact proportion to the amount of the square surface of foliage upon a plant.

Mr. *Egerton Hubbard.*

29. Do you mean that you can turn the two-leaved pines into the three-leaved pines by stopping the shoot?—No; but you will understand me that you never have more than two years' growth upon a two-leaved pine; the third year it throws the leaf off, and I say that if you stop the shoot between each two sets of leaves you can make young shoots come out, and therefore I recommend stopping them so as to get a mass of leaves all up the stem. On most plantations, if you look, you will find only just a tuft of leaves at the top; that is a great mistake. If the stem of the plant were to be covered with leaves from the ground upwards, you would get a great deal more timber than you otherwise would in the same number of years.

30. Are

Sir *Richard Temple.*

30. Are you acquainted with the Scotch forests?—I know some of the Scotch forests.

31. May I ask what happens to be your native country?—Berwickshire is my native country.

Mr. *Egerton Hubbard.*

32. Have you any experience in the schools of forestry at all, either at home or abroad?—No, I have not any knowledge of those of either France or Germany; but we have always had a number of Germans in our nursery, and I sent over my son to Muskau; he was there for a certain time. My grandson has been at Potsdam for a year-and-a-half at the government school there, and in my early days I was formerly at the Botanical Gardens of Edinburgh for about two years and seven months, until I came to England; I studied there.

33. Have you ever trained any young foresters yourself as pupils, or otherwise?—Some of the men who have been with us have gone to forest schools; at the same time I have not made a speciality of that; they have had the run of our nursery, and seen the practice there.

Sir *Richard Temple.*

34. Have you had many young Germans in your employ?—We have had several young Germans in our employ.

35. Have you found them educated in forestry?—They come to us to learn, in a great measure.

36. Do you find that your son and grandson have derived much benefit from their sojourn in Silesia and Germany?—Yes, no doubt. Petsold was the manager for the Netherlands, and my son was there studying under him, and then his son came to us, and was with us three years in my nursery. I make a speciality of growing coniferous plants, and profess to have the best lot in the country, inasmuch as we have competed against all England, and twice in Scotland, and twice on the Continent, and have never come off second-best yet for specimens.

37. Have you found that your son and grandson got a forestry education in Germany which they would not have got in England?—I could not say that, because my son was young when he went there, and I found it was necessary to bring him away from there. My grandson has been to an establishment at Potsdam for, I think, about a year-and-a-half, but he was young when he left; he went there more for the sake of getting hold of the language than anything else.

Mr. *Rankin.*

38. With regard to the operation you spoke of for increasing the number of leaves round the stem of a tree; is that an operation which could possibly be carried on profitably over a large area of forest?—Decidedly so.

39. Would it not require an enormous amount of manual labour?—I do not think that. If you stop a shoot near to the stem it will throw out a number of very small shoots; in other words, I think it is a very great waste of money, as things stand at present. You do not get a good result; you allow limbs to grow, whereas we want straight timber.

Mr. *Rankin*—continued.

40. But you have, I understand, made a practical arithmetical calculation that it is more profitable to employ a large amount of capital to induce these new leaves to be started than to leave the trees alone?—Yes, most decidedly, because you get a good result. I may say that I should never myself plant trees out in a forest under four or five feet high; then they would go out prepared; they would only want stopping gradually back, and you would have a gradually improving result.

41. How often would the tree require stopping back?—If you do it once in two or three years, that would be sufficient.

42. You stated that you would not recommend trees to be planted upon inferior ground?—No; I think that is a waste altogether; if you simply plant for profit, you ought to have good ground, and at the same time ground that you can manage to get your timber away from; in dells, and so on, there is a great deal of difficulty in getting it; it is much better to plant it on level ground.

43. But is it not true that such trees as larch will grow very well on inferior ground which is not worth very much for cereal crops?—It depends upon what the sub-stratum is; many of the pines and larch will grow upon inferior sandy ground.

44. But do not you recommend taking advantage of inferior ground for such trees as larch, for instance, where it is not profitable to grow corn?—That would be quite true, but at the same time you would not get the same result as you would from good ground.

45. But I mean, looking at it as the way of getting the best results from your ground?—No doubt. Not only larch, but also the Corsican pine, because that grows very fine straight timber; that pine was imported by Vilmorin; he imported it into this country, and we grow it very largely, and export it too.

46. Have you formed any opinion as to which is the best kind of pine for planting in this country?—I could supply the Committee with a list of the best.

47. What are one or two of the list?—The Corsican pine. Then, as you plant more, it is necessary to have shelter, and the Austrian pine will be found to afford shelter. Shelter is a very important thing for getting up young trees quickly, but I should never plant them for timber.

48. Would you plant the Nordmanniana?—Yes, the Nordmanniana is good, and also the Douglas fir. I daresay you may remember a good many years ago M. Serre, the Chief Engineer of Cherbourg, made an experiment with certain kinds of timber squared to about an inch-and-a-half; he put them 6 feet apart on trestles, and hung a weight in the centre. As far as I recollect, the larch and the *Abies Canadensis*, that is the hemlock spruce, broke at 260 odd lbs.; the Scotch fir and the Corsican pine went at over 300 lbs.; while the Douglas fir and the pitch pine carried over 400 lbs.; they broke with the same weight, with this difference, that the pitch pine broke short like a carrot, while the Douglas pine was tough and fibrous; the flag pole at Kew

Mr. *Rankin*—continued.

is of that wood. At the Colonial Exhibition Governor Douglas, of Vancouver Island, sent a sample of this wood to Kensington; for every 16 feet 10 sections, showing 160 feet of the tree; the last segment was 7 feet diameter; the tree was 309 feet high, but my experience of the Douglas fir in this country is that I should infinitely prefer the Oregon variety, because no winter ever touches them, but the Douglas is the most valuable timber that grows; it grows rapidly, and will bear the heaviest strain.

49. Would it stand against the effects of weather?—Yes.

50. As well as the larch?—Yes.

51. Have you ever prepared any tables showing the cost of planting trees, and the profit of the sale of them at various periods, deducting the interest upon the first cost, and the rental of the land per annum?—No, I have not done that; but it would not be a very difficult matter to make that out.

Mr. *Munro Ferguson.*

52. Are not Douglas firs very easily blown down in exposed situations?—I have never found that so yet.

Mr. *Rankin.*

53. Is it also your opinion that the seeds for trees to be planted in forests should be grown in nurseries, or that they could be selected by foresters?—Yes, they could be selected by foresters.

Sir *Richard Temple.*

54. With reference to your previous answer, does not the Douglas pine grow in very exposed situations in America?—It grows on mountains at a very high altitude indeed.

55. I myself have seen them growing in very exposed situations?—Yes, I believe they do.

56. Their *habitat* is in very exposed situations?—They grow at a high altitude.

57. They grow at from 8,000 to 12,000 feet of altitude?—Yes, they will grow at 12,000 feet.

Mr. *Egerton Hubbard.*

58. Which was the variety of the Douglas fir that stood the frost?—The Oregon; I would not recommend the Vancouver pine. I have specimens in my nursery that I could show you of both sorts. This last winter and the winter before this I had a Vancouver Island pine injured, but never an Oregon one.

59. Does the Douglas pine grow extensively in Vancouver Island?—Yes, to a very considerable extent; there are large forests of it, but the foliage is of a lighter colour; I can tell them at a glance whenever I see them.

Mr. *Fuller Maitland.*

60. Do you consider that there are large portions of land which might be more advantageously cultivated as forests in England than in any other way?—Yes, decidedly.

61. And you stated just now that planting should be carried out upon the best soils, and not upon inferior soils?—You would get a quicker return.

Mr. *Fuller Maitland*—continued.

62. But do you consider that the cultivation of trees upon the best soils would be more advantageous than the cultivation of corn and other cereals?—You must select from a good parent in order to get a good constitution, then you will be right. If you get an inferior seed, then you get an inferior breed from it.

63. What you say would rather apply to nurseries than to the land which was to be cultivated for profit afterwards, would it not?—I think there is a great mistake in planting too thick. I think it is a waste both of plants and labour; for a permanent forest I should have them proved in a nursery first of all, and never plant them out finally until they are four or five feet high; you will then be able to select the very best and stop them. I should plant the rows south and north, because it is essential to get both the morning and afternoon sun upon them. Then in the intermediate spaces you might grow hard wood, and if you wanted game you might grow food for game or have open spaces; that mode of cultivation would be very much more convenient for getting your timber out ultimately.

64. Have you found in districts in which you have been manager that there was a desire upon the part of landowners and agents for the better cultivation of their woods, and that they would be glad if there were an opportunity for them to employ persons who had a practical knowledge of forestry, and that they would employ them?—Certainly.

65. Do you think it would be a great advantage if there were schools of forestry established?—Yes, certainly. I think it would work a revolution altogether in the cultivation of our woods. You find a few foresters up to the mark, very good woodmen, but with very little scientific knowledge, comparatively speaking.

Mr. *C. Acland.*

66. You stated just now that you thought a great deal of land was wasted in our present forest management. I should like to know whether you think that what is wanted in this country is more extensive theoretical or scientific knowledge of trees?—We want both combined.

67. Do you think that we are more in want of the kind of knowledge which an educated gentleman, say an experienced land agent, a superior man, would be likely to possess, or do we want more technical knowledge in the skilful and practical treatment of trees?—The scientific portion may be acquired in the course of two seasons by an intelligent man, but I daresay you will smile when I tell you that I think a man ought to be phrenologically examined before he is submitted to a forestry training. Unless a man has the organisation for it he will never make a first-class man at it, and if he is a first-class man for it he will shine. In other words, your forester ought to be a practical man with a scientific knowledge, and at the same time he should be able to take the tool out of the woodman's hand and show him how to use it.

Sir *Richard Temple.*

68. But what do you mean by the special organisation to make a first-class man?—I will give you a very remarkable case which has come to my knowledge of late. A gentleman in London had two sons; he was a merchant himself; he meant to leave his business affairs to his eldest son; he was to be a merchant, while the other was to be an architect. A friend said to him, Do not you decide for these lads; go to Fowler and have them examined. He went to Fowler and had them examined, and told him what he intended. Fowler said, If you do that you will make a great mistake; the one that you intend to be the architect should be the merchant, and the one you intend to be the merchant should be the architect; he followed Fowler's advice, and both turned out first-rate fellows.

69. Who is Fowler?—He is a phrenologist; he lives near the British Museum, and is an American.

70. Do we understand you to mean that we might grow in England a quantity of that timber which we have now to import from foreign countries?—Decidedly so.

Mr. *Rankin.*

71. And at a profit?—Yes. Look at the enormous demand for railway sleepers; you do not want very large timber for that. Now, suppose we were to have war in those countries whence they are supplied, then see what a position we would be in; the railways have tried both stone and iron, and neither will answer; they must have the elasticity of timber.

72. Then, do I understand that there is a large area of land in England which is now growing nothing but rubbish, but which might grow profitably timber which we now have to import from other countries?—Yes, decidedly, many thousands of acres; there is no doubt about that.

73. And this involves an economic loss to the country?—Decidedly so; we are obliged to send out money for our railway sleepers, where we might grow them ourselves.

74. In other words, we send timber custom abroad, where we might retain it at home?—Decidedly so; that is the drift of the whole thing.

75. Do I understand you to say that, in your opinion, this economic loss to England could be obviated by a better system of instruction in forestry?—Certainly.

Mr. *C. Acland.*

76. Then, following up that question of Sir Richard Temple's, which bears very closely upon my point, I want to ask you in what direction you think the instruction ought to be given which will enable us in England to supply this timber; do you think that our mistake hitherto has been due to a want of scientific knowledge, or to a want of the knowledge, of efficient practical forestry?—To the want of both.

77. Now I assume that you would not attempt to give instruction to the manager of a large estate, who ought to possess a scientific rather than a technical knowledge, in the same way as you would give it to the technical forester?—I think an agent should have a practical knowledge, and with a good text-book he could soon apply that knowledge by visiting the forest, and so on.

Mr. *C. Acland*—continued.

78. But when you were about to instruct the practical forester, and with him the man who was afterwards going to be set over him in scientific knowledge, you would not attempt to give to the practical forester the same instruction as you would give to the manager, would you?—I think the head forester ought to have sufficient scientific knowledge to carry the whole thing out, and instruct those under him, because you must have your succession of foresters from the estate where the forestry is well managed, and then your school, after a time, will not be so essential.

79. But I understand you to say that we ought to have schools for England, Ireland, and Scotland?—Yes, I think so, decidedly.

80. If we establish these schools, is it more important that we should pay attention to the technical instruction which ought to be given to every young forester; for instance, the knowledge of pruning, and the practical management of trees; or is it more important that we should have scientific and botanical instruction given?—You should give both. It is quite essential that foresters should be able to measure land and to keep accounts; he ought also to know the physiology of trees, in order that he may know which to select for seed. That being once established, the thing is perfectly feasible; the pruning and all that is a practical matter, which must be learnt by those who are to become the foresters.

81. It was just that that I wanted to know your opinion about. We assume that the selection of trees and the selection of sites for the forests, and all the financial and economical management, would be the last and the highest stage of the instruction; but you would also, as I understand, require a succession of young men trained to deal practically with the trees all the year round?—My opinion is this, that with the present conditions it would be essential to establish a school, and to have a number of young men trained to become efficient foresters; they, in their turn, would be able to train others, and you would never be at a loss for foresters after that.

82. Then you do not think that a permanent school is a necessity?—I do not think that it is a necessity, because, if you once got the thing well established, you would have a succession of men, such, for instance, as gardeners; you can always find a good gardener where they have been brought up; there need never be any want of good gardeners.

83. Then you think that what we ought to establish in England is a good system of forest practice, and then the practical instruction afforded in forestry would be sufficient to continue the knowledge?—Yes.

84. But you are of opinion that the present practice in forestry is very deficient?—It is wretched. Three years ago, if I may be allowed to digress for a moment, I happened to be called

Mr. *C. Acland*—continued.

down to Lord Justice Inglis's, of Edinburgh; he has an estate near to the Pentland Hills. There is the finest ironstone there, I suppose, in Britain, about 60 feet under the surface; and he allowed the Shott's Iron Company to calcine their ironstone near to his estate. The consequence was he got his trees injured, and he got an injunction to prevent them from burning in the summer season, which affected the deciduous trees only; but he had a number of very valuable conifers, which were affected during the winter, so that he was obliged to apply for a second injunction. The Shott's Company being a wealthy company got a number of scientific men down; my namesake at Chiswick, Barron, was subpœnaed, and the Curator of the Botanical Gardens at Edinburgh was subpœnaed, all upon the Shott's side. They went over the soil to see if it was suitable for the growing of trees, and they said it was not suitable. Then I was called. Now, six months before that I had made an examination of the trees upon the estate, in view of being called as a witness, and I was the last to be called in. The first question put to me was, did I consider the soil suitable for deciduous trees? I said, "It does not require me to take a spade to examine the soil when I find fine trees already growing upon the estate;" and then one of the barristers read out a list of the altitudes at which the trees were growing. Then I was asked did I not find the trees injured from other causes? I said I did; that certain species were injured. The question was whether the ground was sufficiently drained. The chief cause, I stated, was from the want of moisture in the ground; that the spruce firs growing under some of the large trees had not sufficient moisture. Then I had a number of the branches with me, and the Judge looked at them and said: "What is the use of those?" And when it came to that point I was asked: "How do you prove that the calcining has injured the trees?" I said: "Here is a branch taken from a spruce fir upon the side next the burning ironstone, in the presence of two witnesses; here is a branch from the north side perfectly green." That settled the whole thing. We got the verdict, and the Shott's Company were bound not to calcine near the estate anywhere.

85. I want to ask you whether you consider the science of forestry is at present progressing; are you learning much from year to year?—There are a few very intelligent men that I am acquainted with; Mr. Thomson, the agent for Lord Seafield, upon the Spey Forest, at Grantown, he is a very intelligent man; and there are one or two others that I could name, but those men are scarce.

86. Do you think that anything is to be done by an institution where experiments could be carried on?—Decidedly; I think that is what is wanted.

87. Then a permanent institution would be valuable for that purpose?—It is imperative for a time, but when you once get a number of men thoroughly educated they would be able to teach others, so that it would not be necessary to keep that up.

88. That is for practical instruction?—Yes, for practical instruction.

Mr. *C. Acland*—continued.

89. Do you think that anything is to be gained in England by an institution devoted to the science of forestry for the purpose of experiment?—Yes, that would be necessary for a time, but not afterwards, when you have got some men thoroughly trained.

90. Do you think the foresters in other countries are superior to ours?—I have seen the forest at Fontainebleau, and I do not think that is very well managed. I saw there some splendid oaks; we have nothing at all in England approaching to them, and I saw a paragraph in the newspapers, a short time after I had come home, to the effect that the Emperor had ordered them to be cut down for naval purposes, but that order was countermanded. I have not been in Germany myself, but the young men I have had from Germany I find have not got that practical knowledge I speak of.

91. Then your opinion is that our chief requisite in England is for some few years good practical instruction for the young foresters?—Yes; if you would establish such a school for 10 or 12 years you would be able to get the men.

Sir *Richard Temple.*

92. But based upon science?—Yes.

Mr. *C. Acland.*

93. More devoted to practice, I understand you to say, than to science?—Yes, more devoted to practice. I could give the Committee a list of what I consider at the present moment the most profitable trees to grow, both deciduous and coniferous.

94. And suitable to all soils in England?—Yes, those are the trees that ought to be grown. (*The Witness handed in a list.*)

Mr. *Craig Sellar.*

95. Did I understand you to say that there were many thousands of acres in England which might be very profitably put under forest?—Yes.

96. Which might be more profitably used than they are at present?—Yes.

97. Which parts of England do you most particularly refer to?—I cannot find the exception; in any country you will find gross mismanagement, and land really producing nothing.

98. Do you mean grazing land or agricultural land?—I mean land where rubbishy trees are now growing.

99. But you would not specify any particular parts where that is the case?—I do not think you will find any exception to the rule; you will find rubbish growing all over the country.

100. There you refer to land which is now growing trees all over the country?—Yes.

101. You do not refer to grazing land or agricultural land?—No, but when you come to agricultural land there is another point I wish to mention. I wrote a letter some time ago to the Duke of Westminster. I had done something for his father, the Marquis of Westminster, at Fonthill, some years ago. The Duke has one of my transplanting machines, and takes a great deal of interest in agriculture; I wrote to the Duke, putting the question to the land agents all over the kingdom upon the point. Wherever you

Mr. *Craig Sellar*—continued.

you are all over the country, you find on the land, particularly in the lowlands, a regular glow of colour arising from three species of rananculus, all acrid poisons. If you take a portion of the *acris*, and a little of the butter from the same land, and apply it to the interior part of the hand or arm, you will produce an ulcer in a few hours which all the medical men in the country would not cure in as many weeks. Then I put the question to the land agents all over the country, and I have not found one who knows anything about it, What would be the remedy? The answer invariably is "Plough it." No; if you do that you get a great succession of young plants; that is not the way to do it; it ought to be pared by a steam-paring plough in the month of March, about two inches deep; then throw it into small heaps and burn the whole; then scarify the ground; do not plough it for two years; but scarify the ground, and if any of the seeds come up take green crops from it; you can manage then to clean the land, and then you can plough it. The agricultural state of the country is perfectly disgraceful from that cause.

102. But when you said that there were thousands of acres that might be planted, did you refer to land that has been already planted?—I referred to land already growing a lot of rubbish in the way of trees with little or no attention paid to them.

103. Do you know the number of acres in the country returned as under trees?—No, I do not know that.

104. I think it is about half-a-million on what is called grazing land, and about half-a-million on what is called agricultural land; that is the land now under trees. But you think that in this space of a million-and-a-half acres there are many thousand acres very badly cultivated?—Yes, many many thousands, and it is a great loss to the country.

Dr. *Farquharson.*

105. What kind of timber is grown in the woods of which you have had special charge?—Chiefly larch and Scotch firs.

106. What were they sold for chiefly. I do not mean the price, but for what purpose?—There was nothing sold during Earl Charles's time; during the time I had them in hand; but during the time that his brother was in possession it was chiefly the larch that was taken and sold.

107. Were there good prices got?—The price paid was, I should think, probably about 1 *s.* 6 *d.* a foot or something of that kind.

108. You made good prices by them?—Yes.

109. Then, on the whole, those woods were a commercial success with you?—No, not altogether, because the woods had been mismanaged for a considerable time before that.

110. Then you think that if they had been better managed they would have been more remunerative?—Yes, decidedly.

111. Did the young men you speak of as coming to you come without any previous training?—They had been in establishments in Germany. I have also had them from France and the Netherlands.

112. I think in answer to a question from Mr.

Mr. *Farquharson*—continued.

Acland, you laid stress upon practical training rather than upon theoretical courses of lectures?—Practical training is very essential.

113. Do you think there is very much to be learnt by lectures in practical forestry?—That ought to be taught on the spot, under the trees.

114. You are not in favour, as I understand, of getting a number of young men into a room and giving them a systematic course of lectures on forestry?—The young men ought to have lectures given to them upon the subject of forests; you find some trees diecious, some monecious, some all male, and some all female, so it is necessary to have instruction as to what plants are the best to get seed from.

115. Could not you get that best in the forest rather than in the class room?—Yes, you must show them that in the woods.

116. So that your instruction would be better carried on in the woods than in the class room?—Yes, but the young men ought to be supplied with text books as to the soils and the nature of the trees, and so on.

117. But is there any place to which you could now take young men to show them where trees are properly managed, because if there is so much bad planting in England it would be difficult to find a place in which to teach them?—The best thing would be to send them to some of the Scotch forests, which are better managed than any in England. I have brought with me a work by Brown, of Arneston, published a good many years ago; and I think you will find that the standard work as far as my knowledge goes up to that time.

Mr. *C. Acland.*

118. I would ask you upon that, how, in your opinion, a practical forester can best learn the diseases of trees; do you think that a practical knowledge of the diseases of trees can be acquired without an actual forest to see the specimens of diseased trees in?—That knowledge must be acquired on the spot.

Mr. *Rankin.*

120. Portions of diseased wood might be brought into the lecture room and lectured upon?—Yes, and a knowledge of insects might be taught in the class rooms; they are very largely a cause of disease.

Mr. *C. Acland.*

121. Nearly all the diseases of trees are due to insects?—No, much arises from the mode of culture. I must tell you that almost all the most valuable specimens from California were grown in pots, I put down a number of them, but I had them all washed out. Lady Zetland had three of her foresters to meet me at Up Leatham; she had about 200 plants, different specimens, which she had bought from the nurserymen in London. She said to me, "I want you to plant those to-morrow." I said, "You must excuse me, my Lady, they are not fit to be planted out." She said, "What is wrong?" I said, "They are all pot-bound." The young man Henderson, who was the forester at Up Leatham, said, "I assure you you are wrong." He had potted them all. I said, "Just take out

Mr. *C. Acland*—continued.

half-a-dozen." He said, "I would rather you would select them;" so I pointed out half-a-dozen. He took a cedrus deodara from India, and it was turned out from a large pot with beautiful large roots coming through like the pith of a rush; so two of the oldest gardeners thought that Mr. Barron was wrong. I said, "Just shake it, will you," and I showed at once that it was pot-bound. So I said, "I will come back directly; you wash it out in that trough." We came back in a little more than half an hour, and there it was with large roots nine feet in length, and not one of them fit to be planted out. I wrote a little book on the growing of trees, and Lord Elibank who bought 20 of my books, said, "Barron, if you had done nothing else for us except write that chapter upon pot-culture you would deserve a monument." Another gentleman said, "It is quite true; people who have read Mr. Barron's book will not look at a tree in a pot."

Dr. *Farquharson.*

122. What kind of study do you think should be given in the class room; what subjects do you think ought to be taught to the students by lectures?—First of all they ought to become acquainted with the species which are grown in this country, and also the sexes, and the mode of raising the seeds.

123. Botany, in fact?—Yes.

124. Anything else?—Practical knowledge as to the pruning of trees.

125. We want to ascertain your opinion as to the subjects to be taught the young men in the class-room?—They ought to have a knowledge of geology and the suitability of soils.

126. Have you formed any opinion as to the practical length of the curriculum, how long you ought to train those young men, whether for three months or six months?—I think three months of class-room training would be sufficient; in fact, if they were under a practical man they ought to have two days a week of theoretical instruction, and at the same time they ought to be made acquainted with the manipulation of forest trees; I think the two things ought to go hand in hand.

127. You used the term "inferior land for planting;" I suppose that meant inferior land for tree-planting purposes?—Yes.

128. Does not the very fact of this land now growing rubbish prove that it is an inferior quality of land?—No; the fact that the land is growing rubbish does not at all prove that the land is inferior, but that the land has been neglected, and that inferior plants have been allowed to grow there. You will find that to be the case all over the country.

129. Do you think that if we attended more to our woods we should be able to compete with the foreign wood that is imported?—You would not require to import at all after a short time.

130. But I suppose the only reason why we import foreign wood is that it is imported cheaper than we could produce it?—You would utilise the land that is now going to waste.

131. But it is a matter of notoriety that there is a large quantity of excellent wood, in Scotland, for instance, for which we cannot get any reasonable price, and I do not see how you are

Dr. *Farquharson*—continued.

going to improve that by growing a great deal more?—But I would ask what is the reason that we import such a great quantity of wood?

132. Because it is better wood and cheaper than we can grow; I want to know whether you think by growing better wood in this country we should compete successfully with foreign wood?—You could compete with the foreigners and beat them if you only got the right wood to start with. For instance, you will find a good deal of Scotch fir that is really rubbish not worth growing at all, but if you go to the Spey Forests you find the pinus sylvestris horizontalis; that is the true Highland pine; I think you would get the very best wood from that

133. But the Highland foresters say they cannot get a price for their wood because the foreign competition beats them, and I do not know how you will beat the foreigner and get a better price by growing more wood?—You would grow it cheaper, because in the first place you have the transit and a great deal of extra labour in bringing it from any foreign country; that would be all avoided by growing it in our own country.

134. But all this does not prevent the foreign wood from being sold more cheaply than our own wood. I only wanted to know whether you were of opinion that by having better trained foresters, and growing better wood, we could compete with the foreigner?—If you grow better timber, as good as they grow upon the Continent, you would, no doubt, compete with them, but not otherwise.

135. Then you think that with more scientific knowledge we should be able to get that improvement?—Undoubtedly.

Mr. *Munro Ferguson.*

136. Does your experience show that the most suitable machinery is employed for bringing the wood into the market?—You have the saw-mills.

137. It is not only a question of growing the right timber, but of bringing the right timber into the market by the best means; do you think we are as backward in bringing the right timber into the market as we are in growing young timber?—I think if you go to the Speyside you will find very fine timber grown there, but not all over the country.

138. I am supposing that the timber is good and fit for the market; is it your experience that timber which is good and fit for the market is readily brought into it, and that the best means are used for preparing it; do the foresters study the state of the market, and are the most recent improvements used in the way of machinery for bringing the timber into the market; are we equal to the Canadians and other competitors in one way of bringing timber into the market?—I think we are quite equal to anything you will find in America with this exception, that I have a cross-cut saw, a recent invention which beats anything that we have in this country; it cuts both ways, and with one hand you could cut a log of wood in half the time that two men could cut it with an ordinary saw; that saw has five teeth together, which are perfectly straight, and it cuts both backwards and forwards.

139. From

Mr. *Munro Ferguson*—continued.

139. From where is that saw imported?—From America.

140. But is there much sawing done by hand which could be done by machinery?—Yes, a great deal.

141. Then that hardly bears out your answer that we are upon a level with the people of America, because their machinery is of the most modern kind?—But in the woods we have portable saws worked by steam which we can take from one tree to another, so that you have nothing to do but to bring up prepared timber.

142. But I want to know how far these improved modes of cutting the timber are used in this country?—It is only here and there in the larger and best-managed forests that they are used.

Chairman.

143. Where are those saws procured?—You can buy them in Derby.

144. What is the name of the saw; has it any particular name?—That is more than I can say.

145. At what shop in Derby can you buy them?—At Wetherhead's I bought my saw. (*The Witness drew a diagram of the saw.*)

Mr. *Munro Ferguson.*

146. Does not the general use of the old system of hand sawing tell against the preparation of wood for the market as compared with the modern system?—No doubt it does.

147. Does not that explain to some extent the pressure of the foreign competition?—I have no doubt about that.

148. You have told the Committee a good deal about the very bad state of the existing woods; is that entirely due to mismanagement, or is it entirely due to game?—It is entirely due to mismanagement, because when you go up to any wood of conifers you find the tree has been allowed to grow up to a tuft at the top elaborating sap, whereas if they had been properly trimmed from the first you would have had as much wood in three years as you otherwise have in ten.

149. Then there is the question of game; has preservation done much to deteriorate the woods?—What I would say is that plants ought never to be put into permanent situations under four or five feet high, having been prepared in the nursery.

150. But I am talking of the existing state of things as being very bad; is that at all due to game preservation, hares, and rabbits?—I do not think the game does much damage, unless it is in very young plantations. When the trees get to a certain size the hares do not touch them.

151. You do not consider that the trees are neglected at all on account of the game?—Not forests which are properly attended to.

152. But are there any which are not properly attended to?—A very large number.

153. I want to draw out from you whether any proportion of the bad management of woods in this country is due to the preservation of game?—Yes; no doubt you will find that everywhere.

154. And also keeping plantations quiet for the sake of game; does that contribute at all to their deterioration?—No, not at all.

Mr. *Munro Ferguson*—continued.

155. In regard to existing plantations, is it your opinion that there is much land now not under timber which might profitably be put under timber?—Undoubtedly there is.

156. Would that apply to good or bad land or inferior land?—To good land; bad land I do not believe in if you want a profit. I think the inferior land should be used for game covers, and such purposes, and not appropriated for timber.

157. What do you call good land; a great many people say that land which does not bring in a rental of from 10 *s.* to 15 *s.* a year should be planted, but it is not your opinion that inferior soil should be planted at all, is it?—You will find plenty of land upon a sandstone formation where the soil is not deep, but which will produce very good timber.

158. You mean the inferior light soils will produce good timber, but the inferior stiff soils will not?—Yes; you will not find upon a limestone formation that trees will flourish so well.

159. Then you would not treat it as a question of rental at all. Supposing land is producing from 2 *l.* to 3 *l.* per acre per annum as agricultural land, would you be inclined to plant soil of that value with trees?—No; I should think if you could manage to get 3 *l.* an acre for land in cultivation you had better keep it so.

160. Would you plant land valued at 30 *s.* for agricultural purposes?—Yes, I would.

161. Then with reference to the markets at home, has your experience shown that we have felt the effects of foreign competition much in this country; have prices gone downwards?—I find that foreign timber has been imported largely as a matter of necessity, because we have not been able to supply it ourselves, in consequence of our mismanagement.

162. But have prices fallen in the districts that you have been acquainted with?—No; I think good timber would fetch about as good prices now as I have known it fetch for a long time.

163. You spoke of the good qualities of the Douglas pine for sleepers; have you had any experience of growing silver fir for sleepers?—No, I have not, because the silver fir is not much grown in this country.

Mr. *Evelyn.*

164. I should like to ask you a question with reference to the woods in Cheshire which you managed. I think you said that the larch was the principal tree grown there; what kind of soil was it upon that estate?—It was grown upon silicious loam, upon a sort of gravelly foundation, and there was some of it more of a marl.

165. You would consider that not an inferior soil, but a good soil?—Yes.

166. With reference to the Sennowe Estate, in Norfolk, what was the soil?—Some of it was very good, and some of it inferior.

167. The larch was grown there?—Yes, the larch was grown there; but I must tell you about the plantations up to that time. The estate was in Chancery in a very curious way. That gentleman left about 400,000 *l.*; his son did not please him, he married a French danseuse, and so on. The woods had been very much neglected, but there was some very good timber grown in these woods.

 168. I understand

Mr. *Evelyn*—continued.

168. I understand that, as a matter of fact, those woods were neglected, and I want now to ask you a question in regard to the larch. On the whole do you think that the larch grows better in Scotland than in England; is the climate of Scotland more suitable?—I do not think that you would find any difference in that respect; you will find it as well grown in England as in Scotland.

169. Is not there a considerable difference between the flora of Scotland and the flora of England?—But the timber in Scotland has been very much more attended to; you would find a considerable number of good foresters in Scotland, but they are very scarce in England.

170. Is it the case that some trees grow better in Scotland than in England?—No, we can grow anything in England that they can grow in Scotland.

171. You stated that inferior soils should not be planted, and you stated, I think, that you did not consider the green sand foundation to be an inferior soil; but as far as agriculture is concerned the green sand is very unsuited for agriculture, is it not?—It is not suited for agriculture; that should be planted.

172. Yet upon a green sand foundation is it not the case that the beech chestnut and ash grow luxuriantly?—Yes, that is so.

173. And with regard to the thousands of acres which grow rubbish, I should like to ask you to give me some idea of what you mean by rubbish?—Inferior timber; you will see land agriculturally neglected, and nothing grown upon it except bushes, thorns, and so on; it has been neglected, and not paid attention to.

174. Particular kinds of growth?—Yes.

175. Another thing I understand from you is, that the trees should not be planted until they are four or five feet high; is that the case?—I should prepare them in a nursery upon a plot of nursery land; they should never be planted out until they are four or five feet high; then you never need care about game; game will never injure them.

176. You keep the plant in the nursery until it is four or five feet high; you nurse it with good soil, and then you plant it out upon soil which is comparatively inferior to that upon which it has been grown; would not that rather account for your idea that the tree should be planted only on superior soils; that the trees which have been nursed upon a superior soil will not do so well upon an inferior soil?—A tree will not do so well in inferior as in superior soil, but still it will flourish and do well if properly treated.

177. What are the highest Douglassii in the country?—There is one at Dropmore 120 feet high; that is very valuable timber; it beats the pitch pine.

178. Is there much Douglas pine imported into this country?—Yes, there is.

179. How is its value known as timber?—I have cultivated it and sold it for 20 years.

Mr. *Munro Ferguson.*

180. Have you seen the results of any experiments which have been tried on home-grown Douglas timber?—No, because there has not been sufficient time for it.

Mr. *Munro Ferguson*—continued.

181. Then upon what ground do you decide that it is the most valuable timber that can be grown?—I think I have stated already that Governor Douglas, of Vancouver's Island, the last time there was an exhibition at Kensington, sent specimens of Douglas fir to the exhibition, and then the chief naval engineer, M. Serre, at Cherbourg, had scantling about an inch and a half square of the six different sorts I mentioned, and had weights hung in the middle to see what weight they would carry without breaking. Two broke under 200 lbs., and one carried about 300 lbs., but the pitch pine, and the Douglas fir, carried over 400 lbs. before they broke, with this difference, that the pitch pine broke short like a carrot, whereas the Douglas fir was elastic.

182. The Sequoia is grown very largely in California, but it does not follow, because a tree may be good when it is grown in Canada or California, that it will be equally good when it is grown in this country?—That tree is worth growing. I recommend that tree to be grown.

Mr. *Biddulph.*

183. I want to ask you with regard to the Forest of Dean; are you acquainted with that forest?—I have never been in the Forest of Dean.

184. And you cannot say as to the condition in which the trees are grown there?—No, I have not been there.

185. A great deal depends not only upon the way in which you plant the trees, but upon the way in which you thin them from time to time; is not that so?—I think it wants a new system altogether in reference to that. I should plant them at such distances that they would become adult trees before they would require thinning. I think the thinning is a great mistake as ordinarily practised.

186. But still you must plant trees at a distance at which they could not continue all the time?—I should not grow trees closer than 12 feet, but the way forests are generally managed now is to plant trees at from three to four feet apart, then two thinnings, all of which is useless labour, because you get nothing for them comparatively; therefore, if they were to be grown at a proper distance, it would save labour, and you would get a very much better result.

187. The great fault of our system is, so to say, that we have no system at all; that is to say, that trees are allowed to take their own chance?—That is about it.

188. With regard to what you said about foreign timber just now, are you acquainted with the rates charged by railways and steamers from foreign countries, and the inland rates charged here?—No, I am not aware of that.

189. I think you have some specimens upon the side table which will show the loss which occurs to trees by bad pruning?—I have.

190. Perhaps you would not mind showing them to the Committee?—I will do so with pleasure (*exhibiting some specimens to the Committee*). This is a specimen of the Wellingtonia gigantea, or Sequoia, as it is sometimes called. This

Mr. *Biddulph*—continued.

This is grown from a young one in my nursery; but the land is now sold for building. This is now 28 years old. In this country we have the seasons in cycles, three wet and three dry, with one or two intermediate seasons; you have a much larger development in the wet seasons than you have in the dry. Then here is another specimen, showing the great importance of cutting off and pruning; the moment you see the branch has done growing you should cut it off close; but in consequence of the branch having been allowed to stick out the wood has increased round it, and has left a flaw in the stem, completely spoiling the tree. This was a little branch allowed to remain dead (*pointing to a knot*).

Mr. *Egerton Hubbard.*

191. Do you prune Wellingtonias regularly?—I would do so if I were growing them for a forest, decidedly. The Wellingtonia possesses this property, that a great number of dormant buds by stopping the shoots will break out; upon the small branches you would see the young shoots come out for many years; you do not see that in other trees.

Mr. *Munro Ferguson.*

192. If you had 10,000 acres all under fir plantations, would you prune all the trees upon it?—I should certainly plant them at a distance which would allow them to be permanent trees, and then, instead of their growing up and spoiling each other and being perfectly naked, I should have foliage.

193. If you were making a 10,000-acre plantation, how far apart would you plant your trees?—I would plant the trees 12 feet apart for permanent trees.

Mr. *Biddulph.*

194. Do you consider that in planting them 12 feet apart you would not require to prune them; that they would grow naturally?—They ought to be pruned periodically so as to preserve their foliage as near the stem as possible.

Dr. *Farquharson.*

195. You could not prune millions of trees in a Scotch forest, could you?—It would pay to prune them if you could do it.

196. But they prune themselves by nature; the branches drop off as they grow up?—That is where the mistake is. If the trees are allowed to smother each other they fail.

Mr. *Munro Ferguson.*

197. If you plant them three feet apart and thin them out as soon as it becomes necessary, do not you obviate the necessity of pruning each individual tree?—I should prune them every two or three years for the sake of keeping the foliage close to the plant. I do not want branches.

198. Would you prune them for the sake of profit?—Yes.

Colonel *Nolan.*

199. Would you plant trees 12 feet apart in exposed situations?—Twelve feet apart I should plant trees for permanence, but I should grow deciduous trees between them. Then in exposed situations, where the prevailing winds were from the west, I should plant here and there a row of Austrian firs, which would afford shelter.

Colonel *Nolan*—continued.

200. You would not plant your permanent trees closer than 12 feet, would you, even in an exposed situation where the wind blows hard?—I should plant here and there a row of Austrian firs, which afford much better shelter than the Scotch firs.

201. But that would not do upon the mountain side, would it?—Yes; it would break the wind perfectly then.

202. Would planting 12 feet apart do well where there were many hares and rabbits?—Certainly.

203. Will not they keep their teeth down upon the young trees, no matter what food you give them?—I should never plant them out until they are from four to five feet high.

204. You never plant any yearlings or two-year olds?—No.

205. At what age would you plant them?—I would take them when they are four or five feet high, and plant no more than are required for permanent use.

206. That would be seven or eight years of age, would it not?—About that.

207. But you do not approve of planting the one-year old trees, which you buy at 10*s.* or 15*s.* a thousand?—No; that is a mistake.

Chairman.

208. Is there any good work, a practical manual, upon forestry?—For young men there is Loudon's "Arboretum Britannicum."

209. But is there any handbook?—The best handbook for forestry instruction is "Brown's Forester."

210. Would it be desirable that any manual of forestry should be drawn up, with the view to its being used in any forestry school, or would Brown's book be sufficient?—Brown's book would be very useful. Gordon's "Pinetum," also, is a book I should recommend; but Brown's "Forester" is the best practical work we have upon forestry at the present moment.

211. This copy is dated 1851; is there no more recent work than that?—Gordon is more recent.

Mr. *Munro Ferguson.*

212. Has the timber under your charge been employed chiefly for ornamental purposes, or has it been used for profit?—We grow for forestry largely.

213. But is it usually used as a crop or as ornamental timber?—I grew for crop this year many millions, more particularly of the Corsican pine.

214. But have the trees under your charge been employed chiefly for felling as they became ripe, or for ornamental purposes?—I keep them for both.

215. But is it chiefly for commercial or for ornamental purposes?—It is chiefly for commercial purposes; but I have the finest preparation of ornamental plants in the country.

216. But I want to know what proportion of the

Mr. *Munro Ferguson*—continued.

the ornamental timber under your charge you cut as a crop, and what proportion you retain for ornamental purposes; taking the forests that you are acquainted with, is it your experience that the greater proportion of them are cut as the wood becomes ripe for the market, or is there any large proportion retained for ornamental purposes?—It is principally for commercial purposes, for timber. All the forests that are found in this country at the present moment are simply for commercial purposes, whether it be hard wood or soft wood.

217. But a very large proportion of the trees are allowed to remain beyond the time that they

Mr. *Munro Ferguson*—continued.

are ripe, for ornamental purposes?—We do a very large business in ornamental trees; we prepare them purposely. I have here a specimen of the Araucaria Imbricata; it is a valuable timber, but having been spoiled in the young state, this portion (*pointing to a specimen*) is entirely dead roots. I grew this at Elvaston Castle, and watered it three times a year, letting the hose run all night; it grew at the rate of 20 inches a year for three years; then it ceased growing for three years. From having been pot-bound the roots were killed, and this specimen shows that a portion of the stem was also killed.

Professor JOHN WRIGHTSON, called in; and Examined.

Chairman.

218. YOU are Professor of Agriculture in the College of Agriculture at Downton?—Yes, I am.

219. And you are the Examiner in the Principles of Agriculture in the Science and Art Department of the Privy Council?—Yes, and Professor.

220. Will you tell the Committee the objects of the College at Downton?—The objects of the College at Downton may be said to be to give a sound knowledge both of the practice of agriculture and the principles that underlie the practice, and that object is attained by professorships of theoretical agriculture, practical agriculture, chemistry, botany, geology, estate management, and other subjects which may be considered kindred to the principles of agriculture, which I have not enumerated entirely.

221. Could you tell the Committee for what future professions the students are educated at Downton?—The students at Downton are in many cases training for colonial life; in many other cases they are either heirs of property in this country, or they are the sons of gentlemen who mean either to hire or buy land for them in England; in other cases they are definitely training for land-agency work.

222. What number of students have you at present in the college?—The number of students since last October has averaged 50 as nearly as possible.

223. What proportion of those have been educated for land agents and for the management of estates and property?—It is a question which, of course, I cannot answer at once. I should be very glad to give the Committee definite information, but I should think that 10 per cent. at least of those at Downton, if not 12 per cent., are definitely training for land management, and a good many of them are students of the Surveyors' Institution, which they are able to be at the same time as they are students of the college at Downton.

224. What is the acreage attached to the college for the practical purpose of instruction?—Six hundred acres.

225. Have they a botanical garden?—They have a botanical garden, and we have also recently imported a very excellent collection of forest trees from Messrs. Ballantine, of Carlisle.

Chairman—continued.

Those trees are put there for the express purpose of demonstration in forestry.

226. What is the area of forest trees?—They form a rather long belt of 500 yards in length. They are nursed by larch trees placed at intervals of 12 feet apart. They are all recorded upon a plan, and comprise a sufficient variety of specimens for the purposes of instruction, especially when you take into consideration that all ordinary timbers are naturally to be found everywhere; these are the less general kinds of timber.

227. But is forestry taught practically as well as scientifically and theoretically?—Forestry is taught in the college; I should like to hand in a copy of the paper upon forestry which was set in April; it comes under the head of "Estate Management," it being considered a branch of estate management.

228. Do the students go up for examination to the Royal Agricultural Society of England?—Yes; we succeeded in taking the first place in the Royal Agricultural Society's examination this spring. I see there is an announcement to that effect to-day in the "Morning Post."

229. What proportion of students apply themselves to forestry?—It is a third-class subject, that is to say, a third-session subject, and the senior class comprises 17 students; they get forestry, and the others will get it in rotation, as they come on.

230. Is forestry taught as a special subject, or as part of the regular curriculum of the college?—It is taught as a special subject, and it is part also of the curriculum of the college; every subject might be spoken of as a special subject, so far as that goes.

231. I wanted to know whether it was taught during the regular course of instruction, or whether it was taught at other times than in the ordinary course of the college instruction?—It is in the regular course. During the period of the winter the lecturer would be lecturing upon documents, such as leases and releases, and other matters connected with landed estates. The course also touches surveying, forestry, and valuations. Forestry takes its place among other subjects connected with estate management, and is a very important one.

232. If anybody came to the college desiring to

Chairman—continued.

to have special instruction in forestry, could he devote his attention mainly to forestry as a special branch of study?—Certainly; but such an exigency has not been contemplated up to the present time. If there were much demand for that kind of instruction, I consider that it might be further developed, but it would be rather wasting a student's time to come now to the college, and only attend to forestry; he had much better attend to the other things as well.

233. I see forestry is defined in the report?—The syllabus of forestry embraces "The history, propagation, treatment, uses, and value of timber trees; management and valuation of underwood; the planting, thinning, and general management of plantations; the measurement of standing, felled, and converted timber; the use of the sliding scale; the sale of timber and underwood; the economy of woods and forests in the management of estates. The lectures are supplemented by practical classes in the neighbouring woods." I might also add that the subject of building and construction comes very closely upon forestry, because the strength of timber and the fitness of timber for various uses would come under building construction.

234. Who conveys the practical instruction to the students?—The forestry lectures are delivered by Mr. C. E. Curtis, who has been long associated with the management of estates in Hampshire, and who manages practically the woodlands for a nobleman in the north of Ireland.

235. He is by profession a land agent?—Yes; he is a land agent by profession, and he has devoted himself very much to tuition all his life.

236. Have you, besides Mr. Curtis, a working forester to manage your plantations?—We have, besides Mr. Curtis, a professor of botany, Professor William Fream, who is very capable of teaching botany, including the botany of trees. Now, with regard to your question, we have not a working bailiff, because I should wish to explain that up to the present time forestry has not been a leading subject with us, although an important one. Downton is an agricultural college; if it were to be in any sense adapted to the teaching of forestry it would be necessary to have a man of the sort you speak of, and perhaps other men.

237. What are the facilities afforded at Downton for the subject of forestry?—Downton is upon the confines of the New Forest; it originally was within it, and now we are about a mile and a half from the forest edge.

238. Do the students make visits to the forest, under the direction of Mr. Curtis, for practical instruction?—Yes; and we have woods around us. We have Sir Edward Hulse's woods around us, which I cannot speak of as entirely open except by permission, but possibly permission could be obtained at any time.

239. Are you of opinion that forestry should be taught as a special subject, or in connection with other subjects?—I think it should be taught in connection with agriculture and estate management. I think estate management should not be taught alone; it should be taught in connection with agriculture, and forestry with both. I might also, perhaps, say that the principles of agriculture must be, to a great extent, the principles of forestry; that is to say, the different characters of soil, soil-drainage, the general conditions of the healthy development of trees, and other matters connected with practical forestry must be to a great extent underlaid by the same principles as govern crop cultivation. I believe thoroughly myself that the students, while imbibing knowledge upon the subject of the enemies of crops and the enemies of timber trees, would be imbibing knowledge upon subjects which are thoroughly in harmony one with the other.

Chairman—continued.

Mr. *Egerton Hubbard.*

240. Have any of your Downton pupils gone to the Indian Forest Department?—I cannot call to mind any who have done so.

241. Have you had any students from the German forest schools?—Yes, I have had students from the German universities, but I could not say how far they had studied forestry in Germany.

242. Have you any special knowledge of the training in forestry in France and Germany?—Not anything special. I have a general idea of it.

Mr. *Fuller Maitland.*

243. It is your opinion that it would not be desirable to establish a special school for forestry; you think it ought to be taught in connection with the other matters connected with the management of estates?—I do. I think it is too restricted by itself. I have the same objection to teaching dairying at a school set apart for it. When you have a college and capable professors, I think it is a pity to restrict the instruction given entirely to forestry. When we remember that in this country it is a matter which falls entirely within the cognisance of land agents and land owners, it would be a pity to restrict the course of study entirely to forestry.

244. You think that every reasonable facility could be given at Downton for providing such instruction as is necessary in forestry?—I do not doubt it at all; I think if it were demanded we could develope it.

245. Do you think that facilities could be given for instruction in regard to the treatment of forests in all parts of England, Scotland, and Ireland, from Downton?—I do not know that I should go so far as that.

246. But supposing colleges such as Downton were to be founded, one in Ireland, one in Scotland, one in the north of England, and one in the south, then in your judgment everything would be done to give the necessary instruction?—I think it very desirable that students should not be flying about, leaving their work for long periods, but that everything should be done in the day, and that they should not have to go away for a week at a time to look at things. Fixing my attention upon Downton, I would say that we should want some sort of nurseries on some reasonable area of land in which trees of various kinds were being planted and worked

Mr. *Fuller Maitland*—continued.

for nursery purposes. If we could have such a thing as 500 or 600 acres in the New Forest, I can scarcely imagine a better situation for a school; but not having it we should have to travel a very considerable distance.

247. Do you know whether there is any college in Scotland similar to Downton?—In Scotland there is none, and in England there is nothing but Cirencester.

248. And probably there is nothing in Ireland?—Yes, there is Glasnevin; and, moreover, in Ireland they have a great deal of money devoted to this purpose; it is very much subsidised.

249. Is it subsidised by the Government?—Yes, very largely indeed. Formerly Dr. Kirkpatrick was at the head, and then Professor Baldwin, who was subsequently transferred to the Land Commission, and now it is Professor Carroll.

250. Is there any money given to Downton or Cirencester?—No; whereas they have a great deal of help in Ireland.

251. Glasnevin is a large agricultural school?—It is, with a very fine botanical garden attached to the agricultural school. It is entirely for the benefit of the Irish farmers.

Mr. *C. Acland.*

252. Downton, as I understand, is entirely a private enterprise?—Yes.

253. Do you think that, whether it be forestry or agriculture, it is possible to carry on instruction of this kind without subordinating either the scientific or the practical and economical aspect to the other. I should like to know whether you think that you can carry on scientific and practical instruction *pari passu*?—I do not know whether it is possible entirely to do so in the subject of forestry without some alterations, but I think it is quite conceivable. I think we do it in agriculture very successfully, and I imagine it could be done in forestry, but I think it would be found to be a narrow subject by itself; it is not wide enough, whereas agriculture is very wide, because it takes in live animals as well as crops, and there is a great deal to do with the management of men in agriculture; whereas in forestry, where you have merely the management of trees allowed to grow up for a long series of years, it appears to me that a school entirely devoted to it would be a little too restricted.

254. Is it not the fact that for the purposes of efficient instruction in forestry a wide power of experiment, and scope of instruction, are necessary?—I should imagine so.

255. Is it not really impossible to teach forestry in a practical way at any one centre; does not it require a great deal of travelling about, or else professional illustration?—Yes, no doubt, but still there is no doubt that a very large number of facts can be communicated without travelling about, and also a great deal of knowledge as to the enemies which affect timber, and the various stages of the growth, rearing and breeding of it, as you may say, from the seed; in fact, a great deal of knowledge can be communicated without travelling.

256. I should like to know, as a general principle, whether in your instruction at Downton you direct your attention mainly to the practical

Mr. *C. Acland*—continued.

and technical instruction of the pupils, or to the scientific instruction?—We endeavour to devote attention to both sides, but I believe we are all thoroughly impressed with the preponderating importance of practice; you can do without the science; you cannot do without the practice; we are all thoroughly aware of that. The farm supports a large stock, and a large staff of teachers is provided to give practical instruction; that is to say, in the absolute doing of things.

257. That is to say, in veterinary treatment, in dairy produce, and in all the departments of agriculture, the actual practical knowledge of the use of implements?—We have 40 cows, and the students milk them and make the butter; they can compete with each other as to which will turn out the best pat of butter, and in many other practical competitions.

258. As skill in manipulation can only be acquired by practice in agriculture, is it not the case that skill in forestry can only be acquired by practice?—Do you mean in the use of the axe?

259. Not only that, but in pruning and doing everything from the time you get the trees into your hands for planting?—I admit the principle, but I think there is no comparison between forestry and agriculture in regard to the amount and the variety of the things to be known.

260. Do you not think that your hands are already so full with your subjects in the exceedingly wide subject of agriculture that you may be unable to take up fully the practice of forestry?—No, that was not what I meant to convey; what I meant to convey was rather this: that if a man said, Yes, I have planted a tree, it is difficult to mention any large number of things besides planting it that have to be done to it; it is difficult to elaborate it, whereas in agriculture there is practically no limit to the things which a man might know.

261. Perhaps I may put to you the sort of experience I mean. As you are aware, soils vary very much, and in order to plant economically and safely very great care has to be taken in the first planting of the seedling, and you deal differently with a seedling in clay from what you would in gravel or sand or loam. All those things require actual experiment, and if you were going to plant a large forest you would require to see that the manipulation of the land was properly done with regard to the soil to be dealt with; but that is only one part of the subject when dealing with it on a large scale. Is it possible to teach such a thing as that at Downton or Cirencester, or any other large agricultural college?—Not completely but approximately, just in the same way as I might ask whether you think that a farmer who has never been out of his own parish or county could be a good farmer.

262. He might be a good farmer, but still he might learn a good deal in any other county that he went to?—We all tend to specialise; but I take it that a man might learn his profession in one district generally, and that would enable him to familiarise himself rapidly with the technicalities, or specialities, of any other district.

263. Upon this subject do you consider that science or practice ought to be the predominating object

Mr. *C. Acland*—continued.

object in forestry and forestry teaching?—I should consider both to be important; I should not like to say that one was more important than the other.

264. Do you think that Downton is adapted to instruct young foresters who would not be socially in the same position as the young men I understand you have been training, but young men who would be, say, head woodman upon a large estates?—I think they would find themselves a little out of it, perhaps.

265. Your instruction at Downton would be more for agents?—Yes, for gentlemen who might be in prospect of owning, or colonising, or undertaking management.

266. In fact, having the care of land, or the ownership of it?—Yes; if your question had reference to the last class I should say that practice was the best thing for them.

267. I ask you that question because I think the evidence of the last witness, and some of the previous witnesses, goes to prove that what we want in England is more the training into a good system of practical management, such as would fall within the duty of a forester, and not of a land agent: I rather gather from you that Downton would not be a place for the instruction of the forester, but would be a place for the instruction of the land agent?—I think so, as at present constituted, certainly.

268. I suppose that a forester could be instructed in the New Forest very well, if not under the professors of Downton?—If you take the view that mere practical instruction is the best, it becomes a question whether that is best given in a scholastic or academic way at all, and whether you had not better send your forester student to one man and let him work there; but when you summon together graduates in science, and you ask them to deliver lectures, then the scientific part must necessarily be brought into greater prominence.

269. Practically the lectures and the manipulation would not be undertaken by the same man?—Not by the same man, but they would be managed by the faculty, just as I have instructors under me in agriculture.

270. You do teach the economical aspect of forestry, do you not?—Yes. I would call your attention to the examination papers which we set, and I think that in those examination papers you will see evidence that the subject is treated practically.

271. How is the knowledge acquired which they are expected to show in the answers to those papers; is it acquired by practice, or has it been acquired chiefly by lecture?—It is acquired by lecture, and also by observation, because we are rather a wooded country; we have opportunities of timber measuring, oak barking, and also occasionally seeing planting and other work connected with forests, which we observe when we have the opportunity; but I was pointing out to the Committee that in order to make it complete there ought to be a large area of ground under managed timber. I mean not simply growing wild, as we have in the New Forest, but trees in all stages of growth.

272. As, for instance, in Sir Edward Hulse's woods?—Yes; but it would be better if it could be done in connection with the New Forest, which is a Government forest.

273. But there is not much management there, is there?—I do not know, but it is a large place.

274. I thought you meant as distinguished from trees growing wild?—Yes; the New Forest about our neighbourhood is very picturesque, and very nice to go into; but I was rather imagining a section or area taken out of it, if it were thought desirable, and converted into a nursery.

275. That rather points to the possibility of a section of the New Forest being allowed to be managed by the authorities of Downton?—I did not contemplate that, but I could imagine it. Still, access to a portion would be all that we should want.

276. Your opinion is that, for the purpose for which this Committee is specially investigating, when we are trying to improve the knowledge of forestry in England, it would be better done in connection with such institutions as Downton, Cirencester, and Glasnevin, than by setting up special schools of forestry in other parts?—Yes, I think it would; but I am also of opinion that it would be better if it were spontaneous; that is to say, it would be better done by inducing the teaching of forestry in such establishments. I concur with my friend, Mr. Rogers, in his views, that it would be very difficult to get the Government to take up and associate itself with private institutions, and that an examining body, a board, which might be termed the National School of Forestry, which would examine those sent up from us, or from Cirencester, or from Glasnevin, and give them their stamp of knowledge, would be a more feasible thing than attempting any elaborate school.

277. You contemplate examinations in technical subjects being conducted by the Government, and forestry being one of the branches of the examination?—Yes; I think it would find its parallel with many of the other examining bodies which sit and examine, analogous to the Hanover-square examination in agriculture, and analogous to the Surveyors' Institute examination, where prizes might be given, and a diploma of knowledge; it would be of secondary importance where they got the knowledge.

278. That would induce the agricultural colleges to give forestry instruction?—Yes. I would make the suggestion that such an examining board should, to a limited extent, accept our certificates upon various subjects upon which we might be qualified to grant certificates. For instance, if a student from Downton held our certificate for chemistry, I should excuse him chemistry, and if he held our certificate for agriculture I should exempt him from agriculture. In that way you would associate your board with institutions which are in existence. I think it would be highly desirable that we should be affiliated and connected with such a board, and even represented at the board.

279. At present I understand Downton is not amenable to any public examination?—None.

280. You would not think it undesirable that it should be so?—No, I should not think it was; I should think it very desirable that any test should be applied to the instruction. We always

Mr. *C. Acland*—continued.

do invite outside examiners to test the agricultural knowledge by inviting different well-known farmers to examine every time.

281. Then your advice upon this subject is, that whatever is done should be done rather through public examinations than by any endowment, or by any special institution for instruction?—Yes, I think so; and I think it would be very desirable to take advantage of the existing institutions, such as I am at the head of, and Cirencester, and bind them, if it could be managed in some way; that it should be their interest to fit men for managing forests. I think the instruction would be sought after by land agents more than any other class.

Dr. *Farquharson.*

282. I think you are in favour of a more systematic study of forestry in this country?—Yes.

283. And you think the establishment of a forestry school would be an advantage?—It would be an unquestionable advantage; but at the same time I have been endeavouring to express my view that the subject of forestry is a little too restricted to be the sole object of a school. I should associate forestry with instruction upon the general management of estates and agriculture.

284. Would not the drawback of that be that that would involve such a very extended curriculum that it would really put out of court a number of people who would want instruction in this special direction?—But you must split up your instruction. Your land agent, who has to advise his forester and suggest things to him, ought to have passed through an extensive curriculum of instruction, so as to be able to advise others; but as to the practical forester, I am not so clear that he requires so much scientific training.

285. I look at things naturally from a Scotch point of view. In Scotland we have no land agents; the legal part of the business is done by a lawyer in the nearest town, and then there is the general factor, and the forestry is done by an inferior man, to whom we give, perhaps, from 50 *l.* to 60 *l.* a year?—I have always looked upon that as not a good system. I think that the practice of entrusting solicitors with the management of estates is going out in this country.

286. You would prefer a considerable practical knowledge, that forestry should be treated as a branch of agriculture and not as a separate subject?—Yes.

287. You prefer to commence your practical instruction along with theory; you first get your theory and then get your practice afterwards. I suppose you would hold that your students would not be able to take so much advantage of their practical instruction, unless they had some theoretical basis?—Students always like practical instruction; you cannot keep up a long course of lectures without practical demonstration. If you could teach forestry in the school as we teach agriculture, if you could explain the seed, and then take the students to the sheds where the seeds were being prepared, you would enlist their interest in a practical way.

288. Mr. Acland also put to you the case of the small man, the foresters whom we should be

Dr. *Farquharson*—continued.

glad to see given some kind of instruction; could you suggest some plan by which that instruction could be given?—Of course the great difficulty is the payment; the terms upon which this kind of instruction is given would be really prohibitive to that class of man. To get scientific instruction and to make it valuable, you want two things; one is a fair education to begin with, which we can get in our students, but which you would not be able to get in these men, and in the second place you want the ability to pay a very considerable sum.

289. Would you think it possible to work forests well without some practical instruction?—The woodmen would be men who had been with practical foresters for some years, and had got it rubbed into them thoroughly, in the same way as you would select a bailiff for a farm; you would not go for a scientific man; you would want a practical man.

290. But the difficulty is to get the man?—I would ask, if you wanted a forester at 1 *l.* a week, is he not to be had?

291. He has been brought up in the management of woods which we are told are in a very bad state all over the country; therefore, if he were selected from those woods he would probably destroy your woods as his predecessor had destroyed the woods he had managed?—But the way to reform the woods of the country would be to give a good education on forestry to land agents, so that those who had received it would be able to teach these men at 1 *l.* a week, who would be able to carry it out under proper instruction.

292. But I fear that the amount of requirement for that description of talent in this country is not sufficient to afford adequate inducement to land agents to study forestry?—I think that there is an inducement sufficient for the purpose. I think there is a growing demand for men who can manage estates.

293. Even in the present depressed condition of agriculture?—I should think it acts as a double-edged sword. I am quite certain that the depressed condition of agriculture has sent us a great many pupils whom we should not otherwise have seen; that, in fact, it is a double-edged business; it debars some from going into it; but it forces others to go into it from family reasons.

294. At Downton, if you were required to give a complete course of forestry instruction, could you do it?—We could do it.

295. You have the New Forest handy to give the instruction in?—Where we should be weak in forestry would be in the direction parallel to our farm; we should want woods as well as a farm.

296. I suppose the drawback to the New Forest is, that it is managed upon commercial principles; and again, we have been informed that the management of the New Forest is extremely bad, therefore there would be a danger of deriving imperfect instruction from the New Forest, excepting that you might teach the students what to avoid?—You might have possibly 200 acres cut out of the New Forest and put under the care of practical professors, so that the students from the neighbouring college could come and look at it and work in it.

297. There

Dr. *Farquharson*—continued.

297. There is no object, in your opinion, in starting new schools of forestry if you could adapt existing schools to the requirements?—Yes. I think it would be a pity to start new forest schools with lecture rooms and professors for the purpose of teaching forestry and nothing else.

Sir *Richard Temple.*

298. You mean you would have a class for forestry attached to the Agricultural College?—Yes.

299. Do I understand that it would be sufficient for Downton to have an area of 200 acres, say, taken off from the New Forest?—I think so; I think 200 acres would give ample opportunity for study.

300. And that is within reach of Downton?—Yes, it is within easy reach of Downton; within a mile and a-half.

301. That is to say, if 200 acres of the New Forest were made over to you you would have a nursery, as it were, for your forestry education; it would be as the garden is to a botanist?—Yes, or as the farm is to the farm pupil.

302. Do you happen to know whether there would be any difficulty in getting 200 acres made over to you in that way?—I have not the least idea whether it would be feasible or not. One can conceive it, but whether it would be done or not I do not know.

303. Does it appear to you that there would be any difficulty in obtaining 200 acres of the New Forest from the Commissioners of Woods and Forests?—I apprehend it would require Parliamentary sanction, and there might be a refusal of the Vote. Downton is a private college, and whether Parliament would make over to a private institution any distinct rights of that kind is a question.

304. But it would suffice for your purposes, would it not, if they gave you the temporary charge of it for a limited period of years?—Yes.

Dr. *Farquharson.*

305. Do you think that if you got up an arrangement of this kind for the theoretical teaching of forestry you might institute a short course of three or four months to suit what you call the 1 *l.* a week man?—I could not answer that question straight off. The 1 *l.* a week man would have to be paid for; he could not pay for himself.

306. His master might pay for him. Supposing I wanted to send my forester up it would be a very feasible thing for me to send him up to your Downton College?—And you pay for him.

307. Yes, would that be feasible?—Yes, I have known a nobleman send a young man up to the college.

308. For a short course?—No, for the entire course, and pay for it.

Sir *Richard Temple.*

309. You have said that the existing depression had sent to you pupils who would not otherwise have come in; in what way has it sent them?—I have had younger sons of noblemen who came, as far as I could judge, because the estates wanted much more management and looking after than they used to do, and with a view, I think, to assisting in the management of the estates.

Mr. *C. Acland.*

310. Have you had any farmers' sons coming to you, do you think, in consequence of the depression?—We never had any very large number of farmers' sons.

Sir *Richard Temple.*

311. Is not that the very class of men whose sons you ought to have?—They have not such need to come to us as those who are going to be land agents, or who are sons of landowners; it is a very great question whether you can give the farmer's son a better training than he has at home. Many people think you cannot be taught efficiently at home. I do not agree with that. I believe they can have excellent training at home.

312. Can you say that they have scientific training at home?—Well, they have exact knowledge at home, and scientific training is the application of exact knowledge.

Mr. *Munro Ferguson.*

313. What is the cost at Downton?—Downton and Cirencester are both about the same cost; it compares very much with the cost at Eton, Harrow, and Winchester, for the fees, with board and lodging.

Sir *Richard Temple.*

314. Do you have any sons of moderate country gentlemen?—Yes, a good many.

315. What do you think is the motive for the son of a small country gentleman to come to you?—Sometimes they are going abroad to the Colonies; sometimes they mean to get agencies; sometimes they have a wish to manage their own property, or their father's property.

Mr. *Evelyn.*

316. You advocate, not the starting of a new institution, but utilising the old, and having a Board of Examiners to examine in forestry. Now, are the principles of forestry an universally agreed upon subject; is forestry so complete a science that we could have those examinations upon fixed principles?—No doubt, because it is not merely going into matters purely scientific, but in taking a young man and teaching him forestry it would be necessary for him to master the various kinds of trees, to be exercised in the identification of seeds, leaves, timber, and the grain of timber. There is abundance of scope for the examination. Then after that there is the drainage of the ground, the distances apart, and the pruning, removing, lopping, and a variety of other topics which might be subjects of examination.

317. With reference to the practical management of woods, there are different theories and opinions as to the best mode of planting and what to grow, the treatment of plants in nurseries, and as to the planting of seed, are there not?—Yes, no doubt there are always great differences of opinion, but I take it that the lecturer ought to bring before his class the different views which

Mr. *Evelyn*—continued.

have been held; he ought to say that such a system is not universally accepted, and he should quote those who hold a different opinion. I find as a lecturer upon agriculture that a great deal of my lectures consists in marshalling different opinions before my students, and in endeavouring to show them that different people hold different views. It is a very important thing that they should know that.

Mr. *Biddulph.*

318. With regard to what you stated, that 200 acres would be sufficient if you could get a grant of a portion of the New Forest, I presume that if you could not get a grant of a portion of the New Forest, there would be no supreme difficulty in getting 200 acres of land in the vicinity of the college upon which you might carry out your experiments?—We should have to pay very heavily for it.

319. What is the rent of land in the neighbourhood of Downton?—20 *s.*, 30 *s.*, and 40 *s.* an acre; it is very dear there. I was told the other day that upon the confines of the forest you could not get anything under 100 *l.* an acre.

320. That is for the fee-simple?—Yes.

Sir *Richard Temple.*

321. How can that be the case?—If you try to get a bit of land there you will find it very difficult.

Mr. *Munro Ferguson.*

322. Would that be for building or for agricultural purposes?—It would not be large pieces, but I do not consider land has gone down in value with us. I consider land has gone up in value near Salisbury. I do not think it is the opinion of people that property has gone down in value. One of Lord Nelson's farmers tried to get his rent lowered by giving notice, but the farm was taken over his head instantly at the same price.

Mr. *Biddulph.*

323. With regard to what you said about practical education in forestry, you have not many experienced woodmen in your part of the country, have you; men who can cut down a tree properly?—There is a staff belonging to the forest.

324. Belonging to the Crown?—Yes.

325. But with regard to the country round; not speaking of men employed by the Crown, but the ordinary men of the country, are they experienced woodmen?—There are good woodmen; of course they are in private employment. There are Lord Radnor's woods, and there are various large proprietors around; Lord Pembroke, Lord Normanton, and others.

326. You do not happen to know whether there are what are called clever men there, capable of dressing the stick when it is cut down, and so on?—I have no doubt there are. I think you will find there are good men on every large estate. There is Lord Shaftesbury's estate. I do not think Mr. Turnbull would keep a bad man on the place. I think that what you are saying would not constitute an objection or a real difficulty in the way of teaching forestry anywhere, because if it were desirable to teach it, an expert man could be got for it. If I had to teach shoeing at the college always (as I have), and I wanted a good smith, I can get an excellent man for the purpose.

Mr. *Biddulph*—continued.

327. For a man who wants to learn the cutting down of trees you must have trees where there are plenty to practise upon. Our best woodmen come from the wooded counties; as, for example, Sussex and Herefordshire?—I should rather regard ours as a wooded country.

Chairman.

328. What book do you use for the forestry students?—Mr. Curtis has himself written a very excellent book upon estate management, and Selby's book is a very excellent book.

Mr. *Egerton Hubbard.*

329. When you were speaking of taking 200 acres of the New Forest, did you mean growing forest?—I should want everything, old, unplanted, and partly grown.

330. What is your idea of the ground where there should be a forestry school?—I think that a forestry school should include a sufficient area, we will not say whether it is 200 or 300 acres, or even 50 acres; but a sufficient area in order to exhibit specimens of a large number of forest trees; conifers, for example; a good collection of conifers, and a good collection of hard-wood trees, so that the student should become practically conversant with each kind of tree, and be able to recognise it. Then I think it would require a certain area of old timber ready for felling, which the students could measure standing, and they could occasionally measure it when it was fallen. Then, in addition to that, I should want some of the ground planted every year; a certain small area, it might be only two or three or five acres, planted annually; in process of time you would have timber, in all stages, and students would have an opportunity of seeing the seed planted and the seedlings raised; they would see trees having to be removed, and once in every year or two they would see trees planted out in the adjacent ground, and attended to during their growth. I take it that that would be very valuable experience for them. I was also asked whether I thought all knowledge could be given in one place; I do not think so; I think it would be desirable afterwards that the student should go and see for himself, and gain experience.

331. That points to the college becoming the owners of the experimental part of their ground, or having it upon a very long lease?—It might mean that the college had access to it only; it might mean that it was under the management of the Crown, or under the management of the Woods and Forests Commissioners; but, as long as the college have free access to it, and have the privilege of going there, I do not think that it would be necessary that it should belong to the college, or even be held by the college.

332. But if you were to cut down timber every year it might raise a serious question?—We should presumably act in co-operation with what is naturally the end of all timber; the owners

Mr. *Egerton Hubbard*—continued.

owners of the ground would naturally be cutting down some; I think it might be worked in that way; but it would be possible to hold the land ourselves also.

Mr. *C. Acland.*

333. In your teaching of agriculture do you have a series of experiments going on from year to year?—Very frequently. For instance, we I suppose have been the most prominent in bringing out the value of the basic cinder, which has been recognised now as a principal source of phosphoric acid. We conducted a very elaborate series of experiments upon that, and I hope they will prove very useful.

334. You consider experiments as an essential part of your teaching?—Yes, I do. I think a certain number of strict experiments ought to be carried out every year upon the Agricultural College Farm.

335. Do you think that such an area as you have spoken of, 200 acres of the New Forest, if it were put under your care would be enough to enable you to carry out sufficient experiments? —200 acres is a large area, and I think it would.

336. And you would be prepared to carry out practical experiments if it were submitted to your management?—Yes, a great deal depends upon the demand for instruction, and the inducement that was held out at a college, such as Downton, to undertake what must be a serious experiment. It points to endowment to carry that out, and that is where the difficulty is. I am afraid we will never get endowment.

337. You do not desire it?—No, we do not desire it; it would probably mean control.

338. There is no doubt that if the Government were to give you any land they would expect to have some control, if not exactly over the management, yet they might be willing to consider the possibility of making you some allowance for the purpose of experiment. It might be possible for a Committee such as this to recommend a sum of money to be expended in your experiments over 200 acres of the Forest?—I am told it would not be likely to be carried out. I am connected with the Government schools myself, and I am told that the Government will not support special technical training; they will support general scientific training as at the Normal School of Science, but they will not hold out their hand to afford any assistance to special technical instruction with the view of assisting any special interest. That is the reason why the fees for instruction of the kind that we have been speaking of must always be very expensive; you must have a competent professor, and you cannot get him under 300 *l.* or 400 *l.* a year, and then you have to keep the students for a year, which runs up to say 60 *l.* a year, which all tends to make the giving of this instruction except under the payment of a considerable sum impossible. I would point out also that it is much more expensive than teaching Greek and Latin; you could get a man who had a good class from Oxford or Cambridge for 100 *l.* a year, but you cannot get botanists and scientific men in other directions without their being well paid.

339. Are your experiments all scientific?—

Mr. *C. Acland*—continued.

They are not all strictly scientific; they very often limit themselves to comparative trials of fertilisers, or as I had rather describe it, reducing to strict limits certain matters upon which a farmer would merely tell you his judgment. A farmer would say, I think super-phosphate better than guano on such-and-such a soil. We would say, let us put on three cwt. of guano and three cwt. of super-phosphate over carefully prepared areas, and there carefully watch results, instead of relying upon mere vague statements. The same thing can be also applied to milking cows; one man says, I like rice-meal; one man says, I prefer cotton cake; we say, let us tie up half-a-dozen cows and put half of them on cotton-cake and the other half on rice-meal. Then with reference to planting, a gentleman said to me the other day, "If you want to get an avenue quickly you must plant the trees closely." Now we should plant some closely, and others probably at a greater distance apart, and watch the result.

340. In that way an area of the New Forest might be devoted to the cultivation of trees without any serious expense?—It might even be made remunerative, or at all events pay its own expense.

341. There might be endowment or fellowships?—I should scarcely recommend any institution to go and embark in a big thing unless there were a demand for it. If it is required of an institution such as Downton or Cirencester to put itself to do such work as that I do not see how you can escape some kind of subsidy; it should be subsidised to the extent of guaranteeing it against loss, certainly.

342. Your operations would be increased, and consequently your staff would require to be greater; but what I was looking at was this: Supposing you had 200 acres, or a larger area, you might conceivably, with great scientific value, devote one part of it to planting in one way, and one part of it to planting in another way, getting a scientific knowledge, the result of which would be valuable; but, of course, you would be liable to loss in the same way as anybody else who had forests to manage, and in that way you would require some kind of guarantee?—Here it is proposed that a special department should be developed with regard to forestry; this must be done properly, and it must not be stinted and starved. Then the demand for it upon the part of students is very questionable; you might readily start a thing of that kind, and not have a greatly increased number of students much beyond what we have at the present time. Now, I say, before an institution could start a thing of that sort, it would have to be guaranteed against loss; but I have rather wished to point out that, if a board of examiners sat in London to examine men, that might induce institutions such as Downton or Cirencester, upon their own responsibilities, to fit men to pass examinations. I do not say they would undertake it, but they would at least endeavour to fit men to pass.

343. And I think you come back to the opinion that that could be better done by the assistance of the Government than by the institution of a special school?—I am anxious that something

Mr. *C. Acland*—continued.

should be done; it would be very desirable that we, for example, should be aided by the State, and that we should develope, in connection with agriculture, a school of forestry; but I am rather afraid it might fall through. Still we think, some of us, that if there were a board of examiners instituted it would grow; there would be a commencement made, at all events.

Chairman.

344. Would you suggest that the board of examiners should be connected with the Science and Art Department at South Kensington?—No, I should not. I think that the board which would appoint the examiners (they would not be examiners themselves) should consist of some large landed proprietors, and that the Royal Agricultural Society should be represented upon it; that the colleges of Cirencester and Downton might be represented upon it, and the Surveyors' Institute should certainly be represented upon it. If you had a board which in that way pulled the chief educational centres connected with agriculture to one centre, and if they also had examiners, you might frame an examination which would be very valuable; it would stamp any man who passed it, who held a diploma, as having enlightened views upon the subject.

Mr. *C. Acland.*

345. Upon the subject generally of agriculture, would you suggest that forestry should

Mr. *C. Acland*—continued.

form an important part of such examination?—Decidedly, but I do not think that the education of the handicraftsman, that is to say, of the 1 *l.* a week man, is of nearly so much importance as the education of the higher class men who administer the estates. I think, if a man has an intelligent idea, and would instruct those men what to do, they would carry it out.

Mr. *Egerton Hubbard.*

346. You would propose to have a forest-master who would instruct the forest workmen?—Yes.

Dr. *Farquharson.*

347. You would be in favour of training the landed proprietor himself?—I think landed proprietors would be much better for more knowledge connected with land, estate management, and culture; they very often know very little about it.

348. What would be the shortest curriculum that would be sufficient in your judgment; would you say a year?—I do not think a year is sufficient; I have a number of students who come up for a year, but I always regret that; I think two years would be sufficient, and not too long.

349. That is a long time out of a man's life?—I think two years, if it is taken at the right time, and not put off too late, would not be too much.

Wednesday, 15*th June* 1887.

MEMBERS PRESENT:

Mr. C. Acland.	Colonel King-Harman.
Mr. Biddulph.	Sir Edmund Lechmere.
Viscount Ebrington.	Sir John Lubbock.
Mr. Evelyn.	Mr. Fuller Maitland.
Dr. Farquharson.	Colonel Nolan.
Mr. Farquharson.	Mr. Rankin.
Mr. Munro Ferguson.	Mr. Mark Stewart.
Mr. Egerton Hubbard.	Sir Richard Temple.

SIR EDMUND LECHMERE, BART., IN THE CHAIR.

Rev. JOHN B. MCCLELLAN, M.A., called in; and Examined.

Chairman.

350. YOU are late Fellow of Trinity College, Cambridge, and Principal of the Royal Agricultural College at Cirencester?—Yes.

351. I believe you have been Principal of the Royal Agricultural College at Cirencester for seven years?—I have.

352. The college was instituted and incorporated by Royal Charter in 1845, was it not?—Yes, it was.

353. And it is governed by a committee of management of which Lord Ducie is the chairman?—Yes.

354. Will you briefly describe to the Committee the objects of the college?—The objects of the college are to promote the study and sound practice of agriculture with reference to the general wants of the agriculturist at home and abroad, including estate management.

355. Will you also briefly describe the curriculum of the studies of the college?—The subjects include practical agriculture, and all the branches of the various sciences connected with agriculture and estate management.

356. Is forestry included?—The elements of forestry are included in the course upon estate management, with portions of various branches of knowledge connected with forestry which are dealt with in their special departments.

357. What is the number of students at present in the college?—Eighty-seven.

358. How do the ages of those vary; between what ages do they come to the college?—The students are partly in-students and partly out-students; the in-students are between the ages of 18 and 23; there are two or three of 17 years of age, and the out-students vary from 21 upwards to any age.

359. What is the proportion of in-students?—There are 57 in-students at the present time, and 30 out-students.

360. What proportion of those who are educated in the college do you consider eventually become land agents or connected with land management?—As land agents professionally employed, I should think there would be about 10 per cent.

Chairman—continued.

361. What proportion of the students pass the examinations of the Royal Agricultural Society, and of the Surveyors' Institution?—Not a very large proportion of the whole number; but of the 49 successes obtained at the Royal Agricultural Society's examinations by all comers since its foundation, 40 have been gained by our students; and of the 18 first places secured, 16 have been gained by our students. The Surveyors' Institution examinations are of a very recent date. I can only speak from what the secretary has told me, that one gentleman has passed the best fellowship examination which has been passed, a Mr. Dickson. Several other examinations have been passed there for associateships.

362. Do you recollect the largest number of distinctions which have been gained either at the Royal Agricultural Society or the Surveyors' Institution by students at the college at Cirencester?—The largest number gained externally in one year has been 15, and we had 15 of our own diplomas also in the same year.

363. Can you tell the Committee what are the capabilities and resources of the college with regard to instruction in forestry?—If I might be allowed to define forestry as a branch of knowledge which concerns the formation and management of woods and the utilisation of woods, then I would say that almost all the branches of our curriculum affect it; that is to say, there would be mensuration, land surveying, levelling, and other portions of practical engineering, portions of physics and mechanics (including under physics, meteorology), chemistry, botany, arboriculture, geology, entomology, book-keeping, and the general practical management of woods and plantations.

364. What resources have you in the way of woodlands near the college where the students

Chairman—continued.

can see trees growing?—Taking our smaller woods, first we have our botanic garden, which is two acres in extent; we have nurseries for timber trees of 20 acres, which at the conclusion of this year will be 40 acres, within a mile and a-half of the college; those belong to one of the nurserymen of the town. We have adjoining the college Lord Bathurst's Oakley Park, which has 2,500 acres of timber and plantation, and we have the Forest of Dean within an hour and a-half's ride by rail, which I believe is about the distance of the forest used by the Nancy School from the forest school itself. I should like to say that I am unable to state to what extent facilities for the use of those plantations or woods could be granted to the college; but I just mention them now with regard to their situation.

365. Have you reason to think that possibly facilities would be given by some of the neighbouring landowners?—Lord Bathurst is, I believe, in attendance, and he has kindly mentioned the reasonable facilities he would be prepared to grant; but he could allow nothing in the shape of control or jurisdiction.

366. I believe Mr. Elliot is here, who has the more special charge of forestry in the college?—Professor Elliot, the professor of estate management, deals more especially with the subject of forestry; he will be able to describe the mode of instruction if the Committee should desire it.

367. Have you considered generally the question of the desirability of the establishment of a national school of forestry?—Yes, to some extent I have.

368. Do you consider that it would be desirable that some national step should be taken?—I consider in the interests of landowners and agriculture generally that it would be desirable.

369. Do you think that such a school would be better upon distinct bases or in connection with one of the existing agricultural colleges?—That would depend upon the amount of money probably available. Unless very large sums of money could be granted or raised for the purpose, I think that the present institutions of the country might be utilised at a moderate outlay.

370. If a school were established in connection with an existing agricultural college like Cirencester, what do you think the cost would be?—If it were established at the Royal Agricultural College, having regard to the various departments which are well officered at the present time, an outlay of about 600 *l.* a-year extra would be sufficient, I think, covering the expense of a special professor of forestry, and of one practical forester occupying the same position with regard to the professor of forestry as a farm bailiff would with regard to the professor of agriculture.

371. Then as regards the accommodation for an additional number of students who might come for special instruction in forestry, how could that be afforded?—We have not accommodation in the college for more than 70 in-door students at the outside, but for out-students we have the accommodation of Cirencester and the neighbourhood, where probably they could take an additional 50 students.

372. Is it not the fact that you have occasionally employed as apprentices young men of the agricultural class upon your farm to learn farming. I think I have heard of cases; in fact, I knew one case myself now many years ago, in which a young man went to Cirencester, and was employed upon a farm as an apprentice to learn his work; do you employ men upon those terms?—No, we do not.

373. Then there would be no opportunity for a young man of the class of woodman to learn his work upon those terms?—Not under the present arrangements.

374. But to make the system complete, would it not be desirable that you should be able to include for instruction not only the land agent, but the practical woodman within any scheme of forest instruction?—Yes.

375. Would it not be desirable that you should turn your attention to the question?—It might be difficult to unite the two; that is a practical question which would have to be carefully thought over.

Sir *John Lubbock.*

376. You mentioned the Forest of Dean just now, in your evidence, as being conveniently situated with regard to Cirencester; how do you think it would work if the officer in charge of the Forest of Dean could be appointed professor of forestry at Cirencester?—It would work very well, as far as I can judge, from our own point of view, as a college.

377. It would be very desirable, would it not, that whoever was the professor of forestry should have the control of a certain acreage of woodland for the purpose of instruction?—Undoubtedly: a certain acreage, I think, he ought to have. I think a small acreage would be sufficient for that purpose; but, undoubtedly, the larger the acreage he could have (within certain limits) the better.

378. Can you express any opinion as to whether his duties as professor of forestry in such a case would interfere with his management of the Forest of Dean; would they in any way clash?—I am unable to express any opinion upon that.

379. Has your attention been called to the suggestions which were made to the Committee which sat last year, by Colonel Pearson, with regard to a forest school?—No; Colonel Pearson officially visited the college a few years ago (1882) expressly in connection with the subject of forestry, and I believe he gave evidence in regard to that visit.

380. He gave evidence before the Committee which sat last year; but the question I asked you was, whether you had seen the evidence, and were prepared to make any comment upon it, as to how far you agree with it or not?—I have not seen that evidence, I think, speaking from memory; I certainly have not seen it, at all events, for several months.

381. If Colonel Pearson's evidence were brought before you, would you favour the Committee with any memorandum expressing your views?—I should be very glad to do so.

382. Then I will merely ask you this question, which possibly you might be able to answer at once; Colonel Pearson has suggested that, with regard to the general subject of forest education in

Sir *John Lubbock*—continued.

in this country, it might be desirable "that the general direction and control should rest with a council or board, of which the Director of Kew Gardens might be *ex officio* president, and the Forest Professors at Cowper's-hill members; and to which the Royal Agricultural Society, the Highland Society, the Surveyors' Institution, and similar bodies should send delegates, while two or three of the great owners of private woodlands should be requested to sit on the board;" do you think there might be an advantage in the constitution of such a Board as this, the function of which should be to organise the forest instruction of the country?—I should think so as a body of consultees.

383. I did not quite understand how far you went in answer to the honourable Chairman; I think I gathered that you saw no difficulty in arranging at Cirencester probably some system of instruction for woodreeves, as well as for those seeking the higher instruction?—No; I expressed my opinion that there would be some difficulty about that.

384. Still you think it very desirable that there should be some system of instruction for woodreeves?—I think it would be very desirable that woodreeves should have a training; but that training would be different from the training of the managers.

Mr. *Biddulph.*

385. With regard to what you said about the accommodation in the college, and out of the college for students, there would practically be no difficulty, would there, for out-students to obtain lodgings in Cirencester?—No, practically, there would be no difficulty. I mentioned, I think, the number of 50 extra; but that was taken just as a round number; practically you might say there was unlimited accommodation, if accommodation were required. I have no doubt that such accommodation would soon be provided. The number of applications to me for lodging-house licenses for out-students increases every year.

Mr. *Munro Ferguson.*

386. Supposing a forestry department were established at Cirencester, what class of men would go there to learn forestry; would they be restricted to foresters going to India, and to proprietors and managers, or would practical foresters be able to learn?—I think the general class of men would be the class of estate agents, in this country, at the present time.

387. In establishing a forestry department at Cirencester it would not be likely that practical foresters would go there?—We have no arrangements at present which would admit of their going there.

388. There would be no scale of fees which would admit them?—There is no scale of fees which would admit them at present. Our present scale of fees would undoubtedly exclude them.

389. Would it be possible to amend the scale of fees so as to allow the practical forester to attend?—I could not answer that question without consulting the governing body.

Viscount *Ebrington.*

390. What is the scale of fees at Cirencester at the present time?—It is 135 *l.* for in-students, and for out-students 75 *l.* a year.

Dr. *Farquharson.*

391. What is the length of the course at Cirencester?—The ordinary course is two years, and for the diploma two and one-third years.

392. Would you consider, if a forestry school were started there, that it would be necessary to have an equally long curriculum for the forest department?—I think it would for the managers in consideration of the various branches of science which bear upon forestry.

393. Do I understand that at Cirencester there is a good deal of practical work done; that the students are turned out into the fields?—Yes, we have practical classes in connection with every department.

394. And the same thing would have to be done in connection with the forest department; you would have to take the students out into the woods?—Yes; Lord Bathurst is good enough to allow our professor to take the students out into his woods with a practical forester, and various operations are examined and other operations actually gone through.

395. Are there facilities to admit of instruction being given upon a considerable scale?—Yes, undue facilities with reference to which Lord Bathurst would be able to give evidence himself.

Mr. *Egerton Hubbard.*

396. Have your students any facilities of measuring timber, and of seeing standing timber ready to be felled?—Yes; they see timber cut down, and they have an opportunity of judging and practically measuring timber.

397. And you teach them to ascertain the presence of knots and shakes, and all that sort of thing?—Yes, they see it all.

398. Do you go into the value of the timber at all?—Yes; into the value of all operations connected with timber.

399. And the sale of the cut timber?—Yes.

Sir *Richard Temple.*

400. Have you much acquaintance with land agents in the West of England, as a class?—Personally, I have not.

401. Have you no impression whether they are ignorant of, or at all acquainted with, forestry as a class?—I have my impression.

402. To what effect?—To the effect that they are not well acquainted with forestry as a class. Might I suggest that Professor Elliott, who is himself an estate agent, might perhaps give the Committee more valuable information upon that point than myself. I am giving my impression that they have not had the training in forestry which I consider would be desirable for the managers of forests.

403. And you do not think men can acquire much practical acquaintance with forestry unless they are educated to it?—That is not my opinion, because I should have to distinguish between practical foresters, that is to say, what we call in this country woodwards or foresters, and the managers of a forest or the directors, in the same

Sir *Richard Temple*—continued.

way as I have distinguished between the estate-agent and the bailiffs who are assisting the estate agent.

404. Can the managers of a forest, that is to say, the foresters of the higher class, be fitted for their duty without special training?—No, I should say that such men cannot.

405. Are you at all acquainted with what may be called the woodland areas in western England; that is to say, the various woods, I cannot say forests, but woods and coppices and the various areas under wood?—No, I have no personal acquaintance with them. I have a knowledge, of course, of the Forest of Dean by reputation, and I have a knowledge of Lord Bathurst's woods which are close to the college, but I have no special acquaintance with any of the woods in the West of England.

406. Have you any impression whether those woodland areas, coverts, and the like could be made by management to grow timber at a marketable profit?—I could only give you a general impression upon that point.

407. To what effect?—It is possible, and I would go further and say it is probable, but the opinion would be founded upon what has been done elsewhere. It has been found in Scotland, for example, that land worth about a shilling an acre has, by plantation, been made worth as much as any arable land. I take this as a fact mentioned by Mr. Grigor, who was a well-known forester in Scotland, in his book on arboriculture, in which he mentions that fact himself.

Mr. *Fuller Maitland.*

408. I think I understood you to say that the elements of forestry are taught now at Cirencester College?—Yes, at the present time.

409. But you think that the instruction is insufficient; that you have not the means of giving full and complete instruction?—Quite so; we take it at present as part of our estate management work in subordination to our special subjects.

410. And you have no professor of forestry; you have no special instructor, have you?—Yes, we have our professor of estate management, who is here to-day, who deals specially with the elements of forestry.

411. Why do you think then that his instruction is insufficient?—Because he is not able to be with us the whole time of the year, and we are not able to develop that branch to the extent to which the professor of forestry ought to be able to develop it, partly because it is subordinate to our special subjects at present, and partly because of the outlay that would be necessary.

412. Then you think that if you had it in your power to employ his services for the whole of the year, that would be sufficient?—Yes. I should hope then that the department might be developed to cover all the requirements.

413. Do you think upon the whole it would be more desirable to establish a special school of forestry than to attach a system of instruction to such colleges as Cirencester?—My answer to that would depend upon the amount of money which was likely to be forthcoming. It would require probably 100,000 *l.* to establish a national

Mr. *Fuller Maitland*—continued.

school of forestry, and a very large annual outlay; because you would want professors of various departments even in a national school. At present we have those professors of various departments, and I believe that with a very moderate outlay at Cirencester (I think I mentioned to the honourable Chairman something like 600 *l.* a year), you might have what would be a most valuable school of forestry.

414. You regard it as a subject which it is desirable to teach, in connection with other subjects which are useful for the purpose of estate management?—Yes, undoubtedly, those ought to be taught.

415. The subject is not so large that it would probably be necessary that a man should spend any long time in that special study?—I think a couple of years would be sufficient. I do not think that would be at all too long.

416. Do you think it would be necessary that a man should give the whole, or the greater portion of his time at all events, to that study? Yes, I think so.

417. That would of course render the time necessary for acquiring a general knowledge of estate management much longer than if the subject of forestry were taught at the same time as the other subjects; that is to say, in order to make himself fully qualified for estate management, a man would have to spend two years in learning the subject of forestry, and another two years, or perhaps more, in acquiring the other branches; would not that be so?—No, I think not, because so many of the subjects are common to general estate management, and to the subject of forestry; a good estate agent ought to know something of forestry.

418. Then, I understand, from what you say, that your opinion is that it would be better that the education in forestry should be going on at the same time as the education in other branches necessary for estate management?—Yes.

419. If that be so it would not, probably, be desirable to establish a special school of forestry at any place where those other branches were taught?—It would not be economical. A special professorship alone would suffice.

420. And it would entail more time being given up?—A special separate school would entail more time.

Mr. *Rankin.*

421. Do you think the class of men who attend Cirencester would be able also to go through another course of instruction afterwards in this particular branch of forestry?—I think that is possible.

422. If there were a national school of forestry, do you think there would be a sufficient number of young men found coming to attend that school to make it worth while to establish it?—I think it would be rather an unnecessary demand to make upon their time, if they had to attend a separate school afterwards.

423. But I suppose you would hold that it would not be sufficient for young men entering upon the occupation of land agency only to have a course of forestry; they would require also a course of instruction in other branches?—Yes.

424. Therefore

Mr. *Rankin*—continued.

424. Therefore they would be obliged to attend some other institution teaching the other branches. Therefore my question is, do you think the students could afford the time and expense of going to a school of forestry as well?—I think they would do so if they were obliged; but I think they would very much prefer, both upon the score of time and also upon the score of expense, to get their forest training at the same time as they were getting their estate management training.

425. It would be much cheaper, I understand, for them to get their forestry education at the Agricultural College than to have to go to a special college for it?—It would be cheaper both in time and money.

426. When you mentioned having a grant of 100,000 *l.* towards this national college, would that be for the students to be free or to pay something?—For the students to pay a portion of the expense.

427. Would it be a great point with landowners in engaging agents that they should have a knowledge of forestry?—The special point has never been mentioned in the applications which have been made to me for agencies. I frequently have applications for agencies, but I do not remember a single case in which acquaintance with forestry has been specially mentioned. I should assume that any owner of property having woods and plantations and requiring an estate agent would put that question to him at once, either personally or by letter.

428. But at all events your demand for forestry training has not been very large?—Not in the applications which have been made to me for agents.

429. Do you think that the demand for forestry in this country is large enough for increased knowledge to lead to any commercial gain upon the part of those having the management of and dealing with woods?—I should think it would be.

430. Would it be an equivalent gain?—It would be an equivalent gain, and more than an equivalent, I should think.

431. You mentioned that Cirencester could accommodate 50 extra students, or practically an unlimited number?—Yes.

Mr. *Rankin*—continued.

432. Do you think that 50, or thereabouts, is the whole number of extra students who would care to take up this extra subject of forestry?—That is very difficult to say; but it appears to me at the moment that 50 is something like the number who might perhaps take up a course of forestry if a school of forestry were established in connection with the college, but not that they would come immediately.

433. You think there would be plenty of young men coming forward to study forests to make it worth while to establish a forestry school?—The demand is not great at present, but if a national school of forestry were established in connection with one of the colleges, the demand for such training would probably increase.

Chairman.

434. How far do you make use of the Forest of Dean; do you take your students there in connection with the study of forestry?—We take no classes for forestry to the Forest of Dean, but we have taken the students, for the purpose of studying geology, to the Forest of Dean. I mention that as going to show that it is within easy reach, and that we do not object to going to the Forest of Dean for practical information. Our excursions to the Forest of Dean, I may add, were always limited to one day.

435. They were not strictly for forestry purposes, but, I presume, for geological, botanical, and forestry subjects combined?—Yes, under the professor of botany, and that excursion could be extended to more days than one without any difficulty.

Mr. *Rankin.*

436. I would ask whether the professor of botany could not also combine with his labours the professorship of forestry?—No, he could not. Our present professor of botany is also professor of geology and professor of entomology.

437. But would not forestry be much more akin to his duties than either geology or entomology?—As professor of botany, yes: as such he takes arboriculture and a great deal of that branch which belongs to forestry. But he is also professor of natural history.

The Earl of DUCIE; Examined.

Chairman.

438. I BELIEVE you are Chairman of the Royal Agricultural College at Cirencester?—Yes, I am.

439. And you have been so, I believe, for some years?—I have been for 15 years.

440. I need hardly say you have taken a very great interest in the college?—I have.

441. And you desire to see it developed?—I do.

442. I may ask you practically, as a large owner of property yourself and well able to judge, whether you think that forestry, as far as their resources go, is fairly well taught in the college at Cirencester?—I cannot answer that question; I know that Professor Elliot teaches

Chairman—continued.

forestry, but what the course is and what the details are is a matter that I am not acquainted with.

443. But as a landed proprietor you realise the importance of forestry in connection with any school of agriculture?—I do, fully.

444. Is it your opinion that forestry is better taught in an agricultural school in connection with agriculture and the other kindred sciences, than in a school by itself?—Yes; I think it should be taught with the kindred sciences. I think that land-agents should be instructed in it.

445. And from what you have seen done in the college, have you noticed that a good number of the students have gone into the profession

Chairman—continued.

of land-agents?—A good many have; I have had two myself from there.

446. And do you think from your experience that those who passed were qualified for their duties?—Those men, who pass the diploma course are eminently qualified.

447. Is the general character of the college like that of a college at Oxford or Cambrige, or is the scale of life upon a more moderate scale there?—I can hardly answer that question; there is such a range of social position among the students, especially among the out-students, that it has no analogy to any other place. Perhaps when I say we have had Colonels in the Army and a Vice-Admiral in the Navy as out-students, and that on the other hand we have the sons of tradesmen, Indians and foreigners, and I believe even a relation of the King of Siam, you may judge that the mixture is very great?—There is nothing in the surroundings of the college which would prevent men sending their sons there for a practical and economical education?—No, certainly; nothing.

449. The students can live there as economically as they like?—Yes, the fees are stated in the prospectus, and the out-students can take lodgings according to their purses.

450. Would there be any practical difficulty, do you think, in the admission of young men of a lower grade, such as woodreeves, for practical instruction in forestry?—I do not see how such men could be introduced into the college as in-students, because the terms would be beyond their means; but I think terms might be made that there should be out-students possibly of an inferior grade.

451. Do you think that the advantages presented by what the Committee have been told, that is to say, the facilities given by neighbouring landowners, would be sufficient to give practical instruction in forestry to a large number of students?—Lord Bathurst, who is present, will state what facilities he can afford; I believe he has a very large amount of woodland in the neighbourhood, and I believe he has a great amount elsewhere; and I believe that of late years, since the land in the higher parts of the Cotswolds has proved unprofitable for cultivation, a great deal has been planted with larch, and a great deal more is likely to be so planted in that immediate neighbourhood.

Sir *Richard Temple.*

452. Could the process of planting with larch be carried out extensively in the Cotswolds?—It would depend upon whether the owner preferred to have it planted with timber or see it used as a sheep-walk. A great deal of it will no longer pay as arable land.

453. Will it pay as a sheep-walk?—It would pay a certain amount, but a very small rent indeed.

454. Would the land pay under forest cultivation?—I daresay it would; I see that a great many proprietors are devoting their land to larch, but I think Lord Bathurst might be better able to answer this question than I am.

Mr. *Rankin.*

455. I gather that in your opinion, upon the whole, it would be more convenient that for those who desire to become land agents, a course of forestry should be taken in connection with estate management and land science?—Yes.

Mr. *Rankin*—continued.

456. And that it would be more desirable upon the whole that a course of forestry should be taught at College which also teach other branches?—Yes.

457. Is the expense at Cirencester within the means of those who wish to become land agents eventually?—The answer to that is, I think, that a great number come in who intend to become land agents, and who do become land agents eventually. The College was originally established for those intending to become farmers, but the fees were originally so low that before a few years were over the College had run into a debt of 30,000 *l.*

458. What are the fees?—£. 135 or 45 *l.* per term for the in-students, and for the out-students 75 *l.* or 30 *l.* per term; if they choose to have private rooms they pay 10 guineas a term extra.

Mr. *Fuller Maitland.*

459. Are the students in the College mainly for the purpose of learning farming or for learning estate management?—I cannot answer that question; but I know that a great number of landed proprietors' sons, and landed proprietors themselves, and others come to train for Colonial life, and some for other purposes, and a considerable number for land agents.

Mr. *Egerton Hubbard.*

460. Part of the scope of this Committee is to find any means of making our woodlands more profitable; are there any means, such as planting Corsican pine, which would tend to that end?—I do not think that the planting of Corsican pine would pay in this country. I may say that I think a great mistake has been made in this country in testing new trees, especially conifers, in planting them singly instead of planting them as they grow in their own countries, in large masses. I may say that the Abies Douglassii has not yet been planted in a mass. I have tried it myself and found it answer very well if planted in suitable numbers.

Sir *Richard Temple.*

461. Is not the Abies Douglassii considered to be the finest timber amongst the conifers?—Yes, it is in its own country, but many trees which are the finest in their own country do not do so well when planted in different positions and under different climatic conditions.

462. Have those which you have planted turned out good timber?—They are too young for that, but those which I have seen, as Mr. Hubbard knows, have not as a rule realised the expectation, in the form of a forest tree for commercial purposes; that is, long clean stems without knots.

Dr. *Farquharson.*

463. Would it be possible to have at Cirencester a short course of three or four months for the inferior class of foresters; those men who get small salaries, say, 50 *l.* or 60 *l.* a-year; that is to say, for men who would not be able to expend a large sum of money?—I should think it might

Dr. *Farquharson*—continued.

might be possible; we have already a diploma course of two years and a short course of one year, and I do not see why there should not be a still shorter course for those who were devoting themselves to the practical work of forestry. The professor might be able to give a little more time to individual students who were devoting themselves to that study.

464. Of course they would not have had the necessary training to enable them to understand the real scientific course of training, and you would have to give it to them in a very simple way?—I should think the men who would be likely to become efficient foresters afterwards would be quite capable of understanding any lectures upon forestry which would be likely to be given.

Mr. *Munro Ferguson.*

465. Do you think that the Government should give any assistance towards the foundation of the forest school?—I do not see how one can be established otherwise; no one would enter upon it as a speculation.

466. The Committee have had a good deal of

Mr. *Munro Ferguson*—continued.

evidence about the training of land agents and proprietors in forestry; do you think that land agents and practical working foresters should receive a special training in those same classes, or would you have the same class as that at Nancy, where the course costs about 5 *l.*; that is to say, would you have a separate curriculum for working foresters?—The honourable Member on my right asked that question, and I said I thought it would be possible to make such an arrangement; but the thing is at present *in nubibus*, and I cannot go into those details. All I can say is, that if it were entrusted to us we should do our very best to develope it.

Mr. *Biddulph.*

467. From your knowledge of the science of arboriculture, which I understand is rather a hobby of yours, are you able to say whether the facilities to be obtained at Cirencester are equal to those to be got at any other place?—Yes, I should say so, given the conditions of soil and climate.

Mr. THOMAS JOHN ELLIOT, M.R.A.C., F.H.A.S., called in; and Examined.

Chairman.

468. YOU are Professor of Estate Management and Forestry at Cirencester College?—I am; I am also a Fellow of the Royal Highland Agricultural Society of Scotland, by examination.

469. And you practice also as an estate agent?—I do.

470. Have you had practical instruction in forestry yourself?—No, only on estates.

471. You have not been in the large forests in Scotland?—No, I have picked up my knowledge from my own observation.

472. Have you a practical forester under you at Cirencester College?—I have the assistance of two.

473. Where were they trained?—One is a Scotchman, and the other is kindly lent by Lord Bathurst for the practical field classes.

474. Would you give the Committee some idea of the course of instruction in practical forestry?—There is a course of lectures forming a part of the syllabus of estate management, consisting of about six or seven lectures, as the case may be, and those are illustrated by field classes in the woods, timber-measuring, and valuing standing timber, different processes of planting, grafting, layering, and so on. That is done in the woods.

475. Then the instruction is conveyed first by lectures, and then by practical illustration?—Yes.

476. Is that practical instruction given under your supervision?—Yes; practical instruction is given under my supervision, with the assistance of two foresters.

477. Do the students do manual work themselves in cropping, planting, and thinning?—Yes, they do that themselves in the woods; it is a promiscuous field. We just select a spot, and

Chairman—continued.

show them, by means of plants, how the operations are done.

478. You have a nursery, I think?—We have a botanical garden; there is no nursery belonging to the college.

479. And you give the students instruction at the botanical gardens, do you not?—No; that is under the professor of botany.

480. There is no nursery of trees attached to the college?—No.

481. Then the field of instruction is the neighbouring woods?—Yes.

482. What is the nearest wood to Cirencester College?—It is a scattered area; they are in Lord Bathurst's Park. I suppose the nearest woods would be from 20 minutes to half an hour's walk from the college.

483. Then the students are taken, with foresters, under your supervision, into the woods?—Yes, they are.

484. And they are there shown the different processes?—Yes; for instance, the measurement of standing timber, the measurement of fallen timber, how fallen timber is hewn, and what becomes of the branches and tops, and so on, and the different operations of cording, faggoting, and preparing for market.

485. And are they shown specimens of good forestry and bad forestry, and how to distinguish good from bad?—We have not that opportunity; we have no bad forestry.

486. But you show them what bad forestry might be?—If I have the opportunity.

487. You show them what mistakes to avoid in wood management, I presume?—Yes, but at present it is only on a very small scale in my syllabus; we have not an opportunity of going fully into the matter.

Chairman—continued.

488. Do you take the students into the Forest of Dean?—Not at present; we have not had yet an opportunity of doing so.

489. Are you aware that that practice of taking students into the forest is pursued in Germany to a considerable extent?—I understand that it is.

490. Do you consider that the Forest of Dean would be a good school for teaching forest management?—I have no doubt it would be so, but we have not so far made use of it.

491. The Forest of Dean is not very far from you, is it?—No, it is about an hour's journey by rail.

492. Have you known the destination of many of the students who have left the college?—Yes, of some of them; I was a student there myself 22 years ago.

493. Do you know the proportion who have gone out as land agents?—I could not possibly say positively, but I should say it would be about 10 per cent., from the personal intercourse I have had with those who have left.

494. You have not had a personal opportunity of intercourse with those whom you have instructed?—I have not; land agents are scattered so much.

495. At any rate you think that the practical instruction which they received at the college has been of service to them?—They have always stated to me that it has been so; my subject is a voluntary subject, and I have had the attendance of 50 students, especially during the forestry lectures, and the practical work is exceedingly popular; so much so, that I have classes of 70 in the woods.

496. And you think that if their forestry instruction were developed by a larger staff it would be beneficial for the future land agents of England?—I do.

497. And to the future woods of England?—I do; I think it would produce great benefit.

Sir *Richard Temple.*

498. You think that the system of forestry instruction at Cirencester could be developed?—Yes, I do.

499. And with advantage?—With great advantage.

500. And if so developed it would attract a great number of students, would it not?—From what I have seen of the present course it would, certainly. I have been a professor there for seven years. The department having been initiated by the present principal, my syllabus extends over two years, one Session each year, and my lectures, consisting of 10 lectures, are principally taken up by forestry.

501. Then you go so far as to say that every competent land agent ought to have an instruction in forestry?—He ought to have a knowledge of the principles of forestry as far as the commercial aspect of the question is concerned; it is not necessary that he should have a practical knowledge such as a forester would have.

502. But is it necessary that he should have a practical knowledge of forestry?—He should acquire his knowledge under an estate agent.

503. Would that tend to the good management of an estate?—Whether the land agent is a practical forester or not, the woods are generally

Sir *Richard Temple*—continued.

fairly well managed upon a good estate, because there are practical foresters upon the estate apart from the land agent.

504. But are not the principles of scientific forestry in England either imperfectly understood or not at all professionally carried out?—I do not think adequate attention is paid to them, because all the natural sciences are practically embraced in forestry.

505. In other words, are we not as a nation very deficient in technical education as regards forestry?—Yes, I should say so, in comparison with other nations. There is one great drawback in connection with forestry in this country, and that is the association of woods and covers with game preserves; all agents will tell you that that is a detriment to the full development of woods.

506. Do you mean that the large covers which are now kept for foxes and pheasants might be kept for profitable forestry?—If there were no question of game preserving more might be made of the woods.

507. You have no connection with Cooper's Hill College, I believe?—I have not.

Viscount *Ebrington.*

508. Is it your opinion, looking at the present prices of agricultural produce and timber, that there is much land which might be profitably devoted to timber-growing?—That is a difficult question to answer; because, before the timber has been developed and the land made remunerative, there might be a change in the scale.

Mr. *Rankin.*

509. I gather, from what you have stated, that you do not consider the course at Cirencester is sufficient for the education that land agents should receive in forestry?—No.

510. But you consider that it would be desirable for them to receive their education in forestry in the same place as that in which they receive their education in other subjects?—Yes.

511. How much time do you think should be devoted to the curriculum of forestry?—I think that, by the alteration of the curriculum proposed, if a man went in for forestry he might be allowed to omit some other subject, and yet take in all that was essential.

512. What is the length of your ordinary curriculum at Cirencester College?—About two years.

513. Is that the time required to enable a student to take a diploma?—That is the time required to pass through the several classes of the college.

514. Do you teach them at all as to the nature of the soil; what character of soil produces the best trees?—I have not the time, except to make general remarks, as to the soil. The professors of agriculture and arboriculture do so.

515. Is it your belief that instruction in forestry would be a national gain?—It is so.

516. But it is not your opinion that it would be wise to ask the nation to set up a national school for forestry alone?—If it could be worked otherwise I do not think it would be; it would be much more economical to work it in connection with something else.

517. Do you teach your students the best kinds

of

Mr. *Rankin*—continued.

of trees to plant in different soils?—Yes; I give my idea of the best kind of trees to grow in the ordinary way, the oak, the elm, the wych elm, the beech, and so on. Arboriculture is taught by the professor of botany.

518. But in what respect do you consider that the forestry course is defective?—It might be extended and be made more practical by the attachment of a nursery, and going through the work of the nursery.

519. You consider that the addition of a nursery would be an important adjunct to the establishment of any school of forestry?—Very great indeed.

520. Could that be attained in Cirencester?—Very easy I should say. One of the very best already exists there.

Sir *Richard Temple.*

521. Are you acquainted with the system of forestry instruction pursued in France and Germany?—No, I am not.

Viscount *Ebrington.*

522. Have you increased the area under your planting?—No, I have not; I have acted under instructions in the matter.

523. Would you wish to do so if you had your own way?—If I were advised upon certain points I might give an opinion; but where a regular routine is laid out it is generally followed, unless instructions are given to follow a different course.

524. You stated, I think, that our woodlands are rather sacrificed to game in this country?—I rather said that the production in a commercial point of view is probably lessened sometimes by considering the advantages of sport, rather than the growth of timber and underwood.

525. Suppose rabbits are kept down, does it do any harm otherwise?—No, I suppose not; it is the rabbits that do the greatest amount of harm.

Mr. *Munro Ferguson.*

526. Has there been any improvement since the Ground Game Act was passed?—That does not come under my supervision.

Mr. *Egerton Hubbard.*

527. You were taught yourself at Cirencester College, were you not?—Yes.

528. And after then where did you go?—I went into King's College in London for twelve months, and then up to Edinburgh, and took the Highland Agricultural Society's diploma; that was about the year 1868.

529. So that you have had yourself as good an education in forestry as possible in Great Britain?—There was no teaching in forestry in my time.

530. But you have had a good insight into forestry?—I have had an insight into forestry.

531. Could you go into a big forest in Finland and tell me what it was worth to buy at so much a square mile?—I could go into a wood and tell you the value of the wood, the cubical contents of the trees and their value.

532. Could you advise a company what was

Mr. *Egerton Hubbard*—continued.

the value of the timber in a given wood?—Yes.

533. You could judge of the value of the timber through the absence of knots or stakes?—Yes, I could judge from the timber itself.

534. Your best or most ideal forester would be one who had travelled all over the world, and had seen the various sorts of trees?—Yes, he would be the ideal forester; but that kind of training would be expensive.

535. Your ideal forester would more apply to the position of a head forester who would be highly trained, and who would give orders to the actual fellers and hewers?—Yes.

536. Would you give it as your opinion to the Committee that the school of forestry would more apply to the head men than to the lower ones?—Yes; my idea would be that the school would be divided into two branches, the men who had the absolute control of the forest, such as the Woods and Forest Commissioners, and those who only take in forestry in connection with their business as land agents; they would require a different education.

537. But you would have a school where the natures of the various trees, whether cedars in Asia, or larches in Russia, could all be learnt in one place?—Yes.

Mr *Fuller Maitland.*

538. You say that it would be desirable to have a nursery near the forestry school; what area should it be?—It would depend upon where the nursery was, if it were in connection with Lord Bathurst's estate, or if it were in connection with the instruction in the forestry school. Nurseries are generally regulated by the demand of an estate for young plants.

539. But in connection with the college of instruction it would be necessary that the college should have a long lease, or the freehold of the land, else they could not use it for their experiments?—I presume it would be held upon the same terms as the botanical garden is held now. In that case you would require sufficient room for the shifting of plants before they were planted out in the woods.

540. Do you lecture upon other subjects besides forestry?—Yes, I lecture on estate management; my curriculum extends over two years, and I lecture in the summer term, once a week, every Thursday for ten weeks, and other professors during the various other parts of the year lecture upon practical subjects. I am one of those; so that I have 20 lectures upon estate management, out of which five or six, varying according to circumstances, are devoted to forestry.

541. Do you think it would have been an advantage to yourself if you had had an opportunity of being trained in some regular school, or do you think you have been able to acquire a practical knowledge?—I have been fortunately situated with regard to that. I have had a very long and happy experience with regard to forestry; but others who might follow in my steps might not have the same opportunities of instruction, and others ought to have the opportunity of hearing lectures upon the matter.

Earl BATHURST; Examined.

Mr. *Biddulph.*

542. I THINK you are pretty well acquainted with the college at Cirencester?—I am a member of the council of the college, and I live close by.

543. In fact, the college is situated on your property?—It is on my estate; the college itself was leased to the original proprietors, who now have been succeeded by another body, partly representing the original shareholders, and partly representing the debenture holders and the local gentlemen, by whom it is managed nominally.

544. You consider it a permanent institution at Cirencester?—Certainly.

545. And as far as regards your park and your woods it is situated near them?—It is quite close; in fact, the college looks into the deer park; it could not be nearer; I may say that my woods are of the extent of 2,500 acres in the whole.

546. Do you think there would be any objection, as far as you are concerned, if courses of lectures were to take place in your woods, and the use of your woods were given for the purpose of illustrating them?—As you know, everyone is allowed free access to my park either to ride or drive, and I should be willing to give every facility; but I should decline any joint management.

547. With regard to the question which has been asked with reference to the inferior classes of students, women, and so on, acquiring practical experience of forestry, do you think there would be any insuperable difficulty in making arrangements for such men to be trained?—I think it would be a very grave question to start a fresh class of students; that would be a matter for the council; but as regards the whole question it seems to me that there is only one alternative, either to go for a very large heroic scheme of building a college with a hall and chapel, and all those additional expenses; and if they want the control of an expanse of land they must pay for it; or to try and supplement the present opportunities in establishments where such encouragement would be suitable.

548. Could you state to the Committee about what your staff of woodmen consists of?—I have 25 permanent skilled men, and a certain number of boys; there are also about 12 or 14 men who are constantly employed in keeping up many miles of roads which run through the woods. I should be willing to give every opportunity in the way of affording information, and allowing students to see the work being done; but I cannot hold out any prospect of being inclined to hand over the management to any professor at the college; that would establish a joint power, which I think would be very unadvisable.

549. I forget whether you have a nursery?—It is a very inconsiderable one, but there are very large nurseries in the neighbourhood of Cirencester. I am told that Mr. Jefferies has 20 acres of nursery ground for forest trees, and is extending it to the amount of 40 acres; but I do not speak from my own knowledge.

Mr. *Biddulph*—continued.

550. Practically there would be no difficulty in obtaining a few acres of land for the purpose of a nursery in the vicinity of the college if they were wanted?—I should think there would be no insuperable difficulty; but I should consider that it would be a question for the consideration of the council in a pecuniary point of view, whether they would undertake that or not; and after all it might undoubtedly enter into competition with the local professional nurserymen.

551. Still if a nursery were required by the college for the purpose of experiment, I understand that there would be no difficulty in obtaining the land if they wished it?—I understand that they have already at their disposal a certain amount of nursery ground; but, after all, it requires an old-established place to see the result, and any students in going through a short course would hardly have an opportunity of seeing the result of any experiments that were tried. I think, failing any very large scheme, that the object would be best attained by offering inducement and encouragement to such institutions as are already in existence; and that a large part of the education which would be required for the forestry college is already in the curriculum of the agricultural college.

Mr. *Rankin.*

552. In your opinion, would the advantage accruing be sufficient to justify a large national expenditure in this matter?—I do not quite see why public expenditure should be incurred for one branch of the agricultural interest, such as forestry, whereas it has been hitherto denied for agriculture itself, which is an equally important branch.

553. You have no national grant from the Treasury to the Cirencester College?—No; it has been purely, I may say, a local and voluntary establishment. At one time it was not a financial success; at present, although we have lately expended a considerable amount of capital in the improvement of buildings and in the establishment of a dairy, still there is every prospect of some day or other paying off the debt. At one time there was a very large debt; that has been steadily diminished; and although the original shareholders can hardly see any payment in prospect upon the shares which were originally taken up, there is every reason to believe that the debt will be ultimately extinguished; but it is purely a voluntary and private concern.

554. In your opinion there is no reason why forestry should have a special grant any more than any other agricultural science?—I do not think it should. I think the growth of timber and underwood has suffered quite as much depression as any other branch of the trade. I can only say that the expense of my place, keeping it up, is very great. It is a very expensive place, and it is kept a great deal with a view to beauty and enjoyment, and perhaps a certain amount of

game

Mr. *Rankin*—continued.

game does not assist the growth of trees; but the value of timber has fallen greatly, and as for underwood in some places, in my own part of the country especially, people will not clear it away when it is cut down.

555. In your opinion would a much larger knowledge of forestry have added greatly to the commercial value of the woods upon your estate?—I do not know in what point there has been a failing of technical and practical knowledge; my estate so far, perhaps, does not profess to be entirely administered for the sake of profit. I believe that Mr. Clutton, who is a great authority, expressed the opinion that underwood and overhead timber were almost incompatible as regards profit; and, of course, under beech trees, which constitute the main element of my woods, the undergrowth is small.

556. But do you think with regard to growing timber for profit, in a national point of view, that any much greater knowledge than we now possess, or than is obtainable at present, would be of any great value in increasing the value of the woods generally?—I am not prepared to express an opinion upon that point; I have not had any positive experience.

557. Has your Lordship had any difficulty in finding well-trained foresters?—No. I have a very good man whom we call a woodward, what they would call a forester in Scotland.

558. Do you train your own foresters?—Yes, my man's father was there before him, and he has been many years upon the estate.

Sir *Richard Temple.*

559. Beech timber is valuable in the market, is it not?—It has fallen in value. I believe there is a gentleman coming before the Committee who can speak from technical knowledge. My impression is that its value has fallen about 50 per cent.

560. Could you indicate any particular cause for that?—No, I am not prepared to say that I am. In certain exceptional cases I sell some timber very well by private contract. For instance, not long ago my woodward asked whether I should object to six or seven large beech trees being cut down, that they were wanted for a particular purpose. I think the object was to make rolling cylinders for calico mills, which must be made of beech, and must be of a certain diameter, and of a certain length, and as far as possible without flaw. I consented to certain trees being cut down for that purpose, and I understood that the price to be paid for those special trees was about double the usual market value; that was for a particular object.

Colonel *Nolan.*

561. What is the market value of beech now?—I should hardly like to say now, but we do not sell any good beech under 1 *s.* a foot. The principle on which my woods are managed is, that every year a certain number of acres are cut; the woodward goes through the woods, and upon that particular section, or sometimes generally in two or three different sections throughout the woods, he marks with a red spot or a red line round the small trees those which are to be left. Then the woods are marked out in drifts by stakes, the woodmen fell the standing underwood, and the trees that are not marked, and lay them in drifts; then every year I have an auction, and the timber buyers come round and bid against each other.

Colonel *Nolan*—continued.

Sir *Richard Temple.*

562. Have the recent gales of wind blown down a quantity of beech trees and so glutted the market with timber?—The recent gales this last year did a great deal of damage in the way of breaking down large branches, and that is always a very expensive thing to clear away, because the timber is not worth the labour, and unfortunately these large silver firs have suffered very severely this last year or two.

563. But it was the severer gales of 1882 which blew down all the beech trees upon Lord Haddington's estate?—I lost a great number, but nothing very serious.

564. It was not enough to glut the market and so bring down the price, was it?—Yes; the blowing down of so much timber upon many properties lowered the value of timber very seriously.

Mr. *Egerton Hubbard.*

565. You have one head forester, have you not?—Yes, I have one head forester, and there are two under men.

566. Has your head man had a skilled training in a college like Cirencester?—No, he has merely had practical training.

567. If there were a school the only man upon your estate who would be trained would be the head man; all the rest would learn from practice?—And the head men too; we should be very glad to accept any hints from a professionally trained forester; but I could not devote any land to joint management.

568. Could you make any suggestion to the Committee with a view to making the general forests of the country more profitable than they are now?—I am afraid my views of the profits of woods or other agricultural property are not very sanguine.

Colonel *Nolan.*

569. You said that you did not think that forestry ought to receive any benefit or aid from the State more than any other form of agriculture; do not you think that there ought to be some allowance made for a slow-growing thing by the State; do not you think that the State might profitably interfere in the case of a slow-growing production, the profits on which could not be realised until after a good many years?—I should not grudge in the least any assistance to forestry; the only thing I say is, that if a forest institution is to be established upon a large and independent scale it would require a very large amount of public money to do it.

570. Then your remark would not apply so much to the policy of the State interfering with forestry as to your desire that private establishments should be supported rather than that the State should go in as a competitor with them?—Yes, I think the State would probably consider twice before they passed estimates involving a

Colonel *Nolan*—continued.

large amount of expenditure of public money when I do not say quite that the same result, but the same result to a certain extent, could be obtained with a very much less expenditure?

571. By taking advantage of the establishments already existing in that direction?—I may say that I do not regard the establishment of a large school of forestry as competing with Cirencester; but I say it would require a very large expenditure in building; and if such an establishment is to obtain the control and management of large forests such as have been suggested, it would require a large outlay.

572. Are you aware whether foreign countries are in the habit of encouraging the growth of their timber forests?—I know that there are large timber forests in foreign countries, France and Germany for instance, and I believe they receive assistance from the State; but I am not competent to speak upon that point.

573. You do not object to the State encouraging the growth of trees?—I do not in the least object to it. I can only say that it would require a large expenditure to do it upon the heroic scale that some people might like to see, and that the alternative seems to lie between that and a much more moderate expenditure in encouraging the science of forestry in the existing establishments.

574. Your remarks were exclusively directed then to the training of foresters; do you think it desirable that the State should plant some large tracts of waste land?—I have really not considered the matter. I can only say that I should be very sorry to invest largely in an enterprise of that kind; it might pay, or it might involve large loss.

575. You do not know whether the French, German, and Indian Governments have made large profits by their forests?—I could not say.

576. But you could not give any case in which any country has made a loss by its forests?—I could not go into that branch of the question. I only came here to-day to say that my woods are in close proximity to the Cirencester College, and although I cannot pledge myself to give them any share in the management of my estate, I should be very willing to give them every facility for seeing the work carried out as far as possible for practical purposes; but I do not pretend in the least to say that my woods are carried out in the most profitable or the most economical manner, that not being the sole object for which they are kept in order.

577. Are your woods upon good or second-rate land?—They are upon very indifferent land.

578. How much would the land be worth per acre?—It varies very much in different parts. Our land about Cirencester is not very good.

579. Is it a good meadow land?—There is a good deal of grass, but it is not rich meadow land.

580. Still there is a good deal of meadow?—Part of the estate is situated upon very high land; at the end of the long avenue there is a division of the water-shed between the Thames and the Severn.

Colonel *King-Harman.*

581. Do you say that the management of your woods is not exclusively for profit?—We keep them for ornament and enjoyment, and as much profit as I can get out of them.

582. Has your attention ever been called to the levying of death duties or succession duties on timber?—Yes; I think it was so to a considerable extent when I succeeded to the estate.

583. You had to pay succession duty upon the average fall of timber; you were called upon to do so, were you not?—I think I have still to pay whenever I have a fall in timber.

584. Do not you think that presses rather unfairly upon the proprietors of woodlands, who grow not exclusively for profit, but for the benefit of the country to a certain extent?—I think the succession duty is extremely unpleasant in every form.

585. You do not think that the succession duty with regard to woodlands presses more unequally or more unpleasantly than in other respects?—I am not prepared to say that I do. I swallowed the dose of physic, though I did not like it.

Dr. *Farquharson.*

586. What sort of woods have you principally?—The principal wood is beech, and it is what grows best; but there is a considerable quantity of young oak growing up. I do not know whether it will ever come to any large size. I have some old oak trees.

587. Are woodland operations going on in your forests with sufficient activity to make it a good school; is there a good deal of planting going on still?—There is a small amount of planting; there is always a considerable quantity of cutting, and I think it is well done; it is done by a practical man; I do not know that there is much room for science.

588. Do you think that with the present prices and the present foreign competition arboriculture can be a very profitable pursuit in this country from a commercial point of view?—I have no very great faith in getting much of a return for my money when I plant. I think a certain amount of money may possibly be realised; but there certainly is no profit until an interval of so many years that it is impossible to predict what the prices may be when the timber comes to any value. The thinnings of larch trees all the first part of the time do not come to anything that repays one.

589. Is it not the case that the use of wood is shrinking very much in this country owing to the use of iron; that iron is superseding wood very much?—I think the cheapness of iron has had a decided effect in cheapening the price of timber.

590. For instance, coal props are made of iron very often, are they not, and railway sleepers?—I have no iron in my part of the country; most of my timber goes to the Stroud Valley, where they make bobbins for Birmingham, and seats for chairs, and a great deal is cut up in the Stroud Valley, and made into walking sticks.

591. Do

Mr. *Munro Ferguson.*

591. Do you use your own timber for permanent improvements upon your property, or do you use foreign timber?—It depends upon what it is for; I am afraid I do not believe in using home-grown timber for building purposes; the roofing of buildings in Gloucestershire (of course that is merely a local matter) is generally slabs of stone, which are of great weight, and I do not think home-grown timber, as a rule, does for the rafters. I have some larch which is very useful.

592. Are those larch plantations on the Cotswolds in impaired health or diseased?—I think they have done very fairly; I have some beautiful specimens of larch; but I do not think larch is a perfectly reliable crop.

593. With regard to the encouragement of the growth of timber, do you think money might be advanced by the Government in the same way as money for drainage, under proper supervision, to encourage plantation?—I suppose if you borrowed money from the Government they would not lend it you particularly cheaply, and I think the profit might be doubtful; it might encumber the estate afterwards. I should be sorry to borrow money on planting for the future benefit of the estate. I think one might find oneself saddled with the debt, and not much profit at the end.

594. I suppose your hard wood trees are all very carefully pruned?—Yes; the woods are large, therefore you cannot be always going through with a bill-hook and pruning them; it is done rather upon a large scale?—A large number of acres are dealt with each year, and in regular order. The number of years that the underwood is allowed to stand before it is cut varies according to the soil, and according to the overhead timber. We do not, as a rule, cut the large timber until we also cut the underwood, so as to draw away the timber without injuring the underwood.

595. So I suppose you find that large plantations are more profitable than small patches of plantation?—I am not prepared to say that. I am afraid the profit upon timber altogether is very moderate.

596. I suppose that depends upon the situation with relation to the market a good deal?—It depends upon the situation with relation to the market and the soil of the spot you are dealing with.

597. And the cost of the carriage?—The cost of the carriage is pretty nearly a constant quantity with me; I have the advantage over a good many of my neighbours in having made a great number of good roads for taking away the timber.

Mr. *C. Acland.*

598. I should like to ask you this: you have, as I understand, a very large amount of woodland?—Yes; I have 2,500 acres. I sent down to my office in view of the possibility of being asked for the exact acreage, and I was told it was 2,500 acres.

599. Have you been in the habit of employing one forester or more?—I have a permanent head forester and 25 regular men.

Mr. *C. Acland*—continued.

600. Who would be woodmen?—Yes, regular professional woodmen; I may say that during part of the season they are occasionally turned over on to the farm; but they are all skilled men.

601. Men accustomed to the cutting down of trees and skilled in managing all that has to be done in the woods?—Yes.

602. Have you been able to obtain English foresters, or have they been Scotch?—Mine are all Englishmen.

603. Including the head forester?—I think he was born upon the estate; at any rate, he has been there since I have had any knowledge of it. I was not born upon the estate myself; I succeeded only about 10 years ago.

604. You found him there and you believe he is a native of the place?—Yes, I think so; he has been bred upon the place.

605. I suppose he is a man of a considerable age now, and therefore more thoroughly experienced?—Yes.

606. But you are probably aware that our object here is to ascertain whether anything can be done to encourage a knowledge of forestry, and to improve the treatment of our woods, and, as you are also probably aware, something has been said about forestry schools; now it naturally occurs to one to be rather uncertain as to in what direction our efforts can best be directed with a view to that object of teaching; I want to know whether it is your Lordship's opinion that anything can be done in the way of teaching the under-woodmen?—I am not prepared to say; of course, you could not establish a college for them.

607. We must have an institution where such a man as a woodman, who is a labourer's son, perhaps, and has worked three or four years under the forester in your woods, might be sent for a month, or perhaps for two or three months, to be taught anything that he can be taught in his direction; I am not prepared to say that much can be taught, but that is what we want to arrive at; do you think that would be of any value?—I do not see that my work would be better done because the man who has to handle the axe would be conversant with the scientific principles of forestry.

608. But the practice, of course, depends upon science, and there may be points which a wide experience, such as would be in the possession of any man whom they had at the schools, might be able to teach, such, for instance, as the different rules of pruning; some people say when you prune you ought to leave the stumps of the branches a certain length, some say you ought to cut them close?—I do not see my way to that, but I have not considered the matter. My sole object in coming here to-day was as being connected with the Agricultural College at Cirencester, and taking a large interest in it, to say that although I could not give any share in the management as regards my woods to the staff of the college, the students should have every reasonable facility for looking on, and ascertaining the details as far as my estate provided opportunities.

Mr. *C. Acland*—continued.

609. May I ask whether it is your opinion that a college could usefully undertake to teach forestry in any form, either to superior or inferior men?—When you say "undertake," I do not think it would be wise for the college to interfere with its present course of agricultural education, in which I think they have been eminently successful, because, of course, if one takes the test of public independent examinations, out of the 49 certificates of diploma which have been given by the Royal Agricultural Society, and which are open to all the world, 40 have been given to students from the Agricultural College at Cirencester, and that I consider is a sign that the agricultural education has been eminently successful. Now, the question is, to what extent forestry is to be taught, and the alternative, as I have already stated, would appear to me to be between a very large and heroic scheme involving a very large expenditure, or the encouragement of the teaching of forestry in a way that would involve less expense, and perhaps bring about more good results. If you had to build a large establishment with a hall and chapel, and to undertake the management of a large estate, I do not know where you are to put your hands upon it.

610. You think, perhaps, that your forester or young men of that kind, men who are intended to take such situations as your forester holds now, could benefit by going, for instance, to Cirencester or Downton?—I think the benefit would be more felt with regard to the education of the land agents, and that their skilled knowledge might direct the practical workmen.

611. I rather gather that it is not your opinion that we could attempt to bring up that class of foresters?—I have no objection, I have no prejudice against it, but I do not quite see the way. I think it would only affect foresters on very large estates; they would be the only men who would be in a position to avail themselves of the advantages of the college. And, after all, one man can direct a large number of workmen; it is more a question of labour and skilled labour. Of course one sees woods where the underwood is very badly kept, and one sees woods where it is very well done; but I think one forester can direct a great many men.

Sir *John Lubbock.*

612. You said just now that you thought it was only foresters on very large estates to whom this scheme would be applicable beneficially, and that one head forester could direct many men; but do not you think it desirable that upon every estate which has any extent at all of woodland, there should be one man who had had a practical training in forestry?—It would be very desirable if it could be obtained in a reasonable way.

613. And if the profit on woodlands is moderate, which is no doubt the case, that is all the more reason for seeking the best possible management of them?—Certainly, if science can affect the question.

Sir *John Lubbock*—continued.

614. You heard Mr. McClellan's evidence at the earlier part of our sitting; do you agree generally with the evidence that he gave?—I think so, as far as I remember.

615. Has your attention been called to the evidence which Colonel Pearson gave before the Committee last year, and the suggestions he threw out with reference to the establishment of a forest school?—I cannot say that I have studied his evidence carefully; I only heard a day or two since that Mr. McClellan was coming from the college to give evidence before the Committee, and I only attended to say that I should be willing to afford facilities, but that I could not hold out any hope of practical interference in the management of the estate.

616. Then in that case I will not ask you as to his suggestions generally, but there is one that I would like to ask your Lordship about. Colonel Pearson appeared to think it desirable that there should be established a sort of Council of Forestry, of which the Director of Kew Gardens should be the President, and upon which there should be representatives of the Royal Highland Society, the Surveyors' Institution, and other kindred bodies, with the view of seeing what could be done to encourage the management of woodlands in this country; would you consider it desirable that there should be some board of that kind to consider the question?—I do not quite see who would be placed under their control; it seems to me (it is the first time I have heard of it) rather like the appointing of a Commission in succession to this Committee. I do not see any objection to it, but I do not know whom they would control.

617. I do not think the idea was so much that they would control anybody, but that they should ascertain whether any encouragement could be given to the study of forestry in connection with the Royal Highland Society, or any of the colleges?—I do not see any objection to it, and I should be very glad to accept any advice they would be kind enough to give.

618. I understand you have no strong opinion upon the subject, but you rather lean to the opinion that a board of that kind might be useful?—I hardly feel competent to express an opinion; but I rather mistrust the results of it. It sounds very well, and if they made any scientific suggestions, I should think that anybody who possessed woods and woodland property would be very pleased to accept their advice.

619. I think Colonel Pearson's idea was that a committee such as this, which will shortly conclude its labours, might suggest the course which would be best suited to the moment, but that circumstances might change, and it would be desirable that the Government should have a body of advisers whom they might consult upon the subject?—Good advice is always acceptable.

Sir JAMES CAMPBELL; Examined.

Chairman.

620. YOU are the manager of the Forest of Dean under the Woods and Forests Commissioners?—I am.

621. What is the extent of the woodland portion of the Forest of Dean?—The amount of woodland, including the High Meadow Estate, which is a freehold belonging to the estate, and adjoining it, is about 16,000 acres; we do not know exactly, because a good many places have been planted in the open which are not specifically measured, but, taking it from the last Ordnance map, it is about from 15,000 to 16,000 acres. The whole thing is about 25,000 acres, including the High Meadow Estate. In the reign of Edward VI. it was more than 100,000, but of late years it has been, including that estate which I have mentioned, about 25,000 acres.

622. And how much of that is comparatively new plantation?—With the exception of a few plantations, which are about 130 years old, the majority is from 70 to 25 years old.

623. What is the timber principally?—Chiefly oak.

624. Is there any beech?—Very little.

625. And Scotch fir?—No, except that it has been planted as nurses in new plantations.

626. And the larch?—We have larch, but they are cut away from the oak in course of time.

627. Do you find that the oak grows best in the Forest of Dean?—Many kinds of timber grow well there, but being a nursery for timber for the Navy, of course, oak forms the staple timber of the crop.

628. How are the thinnings conducted in the forest?—In districts, according to the age; we do it periodically.

629. And you have there, I suppose, a resident forester?—Yes, we have several. There is a very large population about there.

630. There is one head forester?—I am the head of it all.

631. And under yourself?—I have an assistant, and a clerk who is a sort of assistant, and my assistant has another, who is also an assistant woodman; we have keepers and ordinary woodmen besides.

632. Are your assistants trained foresters?—They are trained from their youth in the forest.

633. Are your assistants mostly English?—They are all English, with the exception of one or two Scotch woodmen.

634. Have you any difficulty in finding capable well-trained men as woodmen?—We always make them ourselves; we train them up to it.

635. What county, or what country, supplies the best men?—I do not know that we have any but Gloucestershire men except one or two importations from Scotland.

636. Have the Office of Woods and Forests given their attention to the question of the establishment of a school of forestry?—In a general way; they have not gone into any particulars, as far as I know.

637. Do you know what the collective views of yourself and colleagues are upon the subject?—My view is, that I do not think the country is large enough to keep a school of forestry going, because the system of forestry in Great Britain is very different from the system of forestry in India, from what I have read, from that in the Colonies, or even from that pursued in France and Germany. You have not an amount of forest in Great Britain sufficient to require a school exclusively for the purpose. It would be a very good thing to have the power of getting people part of whose education has been in that direction; but I do not know that you could make a school of forestry exclusively to pay.

638. Apart from the question of a distinct school, would it be desirable, in your opinion, to connect with some of our places of education a system of forestry education?—Yes, I quite admit that; of course that must be, to a great extent, for the higher branches, that is to say, for gentlemen's agents, and people like myself, who have to do with the Royal forests; but the ordinary forester who is required upon an estate is a practical man, who should have learned his work, I always think, from having begun it with his own hands.

639. I do not know whether you were in the room when Sir John Lubbock asked one of the witnesses a question as to the desirability of having a representative body to represent the interests of sylviculture and arboriculture, consisting of members of the Surveyors' Institute, and of the Woods and Forests, the Agricultural Colleges, Kew Gardens, and so on, in order that that question may not be entirely lost sight of when the labours of this Committee are over?—I think that would be a very good idea. I should not, however, wish that anybody of that sort should have the right to interfere in the management of any Royal forest, or any private plantation; but to keep the thing going it would be quite a good thing.

640. I cannot think it was supposed that it should have any more active function than that of exercising representative influence and advising?—There could be no objection to that.

Sir *John Lubbock.*

641. As there are a large number of persons who own from a few hundreds up to a few thousands of acres of woodland, do you not think it would be of advantage to them to get foresters who had had a training in a school of that kind?—I quite think so, if you could bring training of that kind within the means of the class of person who would be required. Those people, however, who would be fitted for what are ordinarily called foresters and woodmen could not certainly afford, and probably no one could afford for them, to send him to a school of forestry, which would cost a great deal; but such a thing as this might do, that if there were a good handbook of forestry, a text-book, and it were taught at the national or board schools, then when a young lad determined to take that as his business or trade or profession in life, he would learn far more under a good forester upon a private estate or in a Royal

Sir *John Lubbock*—continued.

forest than he would in a college; a man trained in a college of that kind would very likely get above his work, at least it strikes me so.

642. Have you considered whether the instruction which is given at Cooper's Hill to the Indian Forest officials could under certain modifications be made available for the foresters upon private gentlemen's property in this country?—I know very little about it. If I am not mistaken it is quite a new thing to have anything to do with Cooper's Hill; those who were educated for India usually went to Nancy, I believe, under the former system.

643. Have you considered whether the education given at Cirencester could not, with some modifications, be adapted to such a purpose for the instruction in forestry?—Yes, I think so, for the higher classes of gentlemen's agents; but there is the same difficulty with regard to that as to the expense for labouring men's sons. They have the benefit of Lord Bathurst's estate close by, with some thousands of acres of woods, very well kept, and moreover, they have the Forest of Dean not very far off; but still it is an expense to get there.

644. Would it be possible that anyone who was in charge of the Forest of Dean, or any other forest, should be a professor of forestry to the Cirencester College or the nearest similar institution, and take the pupils to the forest to see the mode of management, as is done in France and Germany?—Yes, I think it would be a very great benefit to them; but of course to make a person in my position a professor of forestry would very probably necessitate his absence from his duties to rather too large an extent, unless there were a place in the forest where he could teach.

645. In the instruction that is already given at Cirencester there is a great deal which has a bearing upon forestry, and if yourself, or a gentleman in your position, could afford the time to give forestry instruction to the pupils, that, combined with the instruction already given, would afford forestry education to them?—No doubt it might, but it appears to me that the professor of mineralogy or botany would be upon the spot, and be equally competent to give those lectures, and then it would be better to send the pupils to the forest for me or my successor to show them the way things are done.

646. But as to the arrangement of the trees with reference to the soil, and what species grow the best together, that would be more in the department of someone like yourself, would it not, than in that of a professor of natural history?—It would, undoubtedly.

647. Have you considered the evidence which was given by Colonel Pearson last year?—I only received it this morning. I have seen what he said the year before last, but not what he said last year.

648. Would you kindly look over that evidence and favour the Committee with any memorandum setting forth your views upon the subject?—I will look it over with pleasure.

Mr. *Rankin.*

649. I gather from your remarks that you consider the scope for foresters in this country is not sufficiently large to require the establishment of a national school?—I do not think it is; the amount of woodland upon estates in this country is really comparatively small, except in a few cases.

Mr. *Rankin*—continued.

650. And for land agents, do you think sufficient information could be acquired at schools like Cirencester?—I do, with the assistance which has just been talked of for special teaching.

651. With regard to the practical teaching of forestry for workmen, have you any practical suggestion to make as to what could be done in the Forest of Dean?—We should have no objection whatever to teach in the Forest of Dean all the seasons' work, and the plantation and drainage of soils, and all description of teaching; we could give the whole of that.

652. But is there any system of apprenticeship which could be carried out for poor lads amongst your own foresters in the Forest of Dean?—They might very easily be taught in that way.

653. Could that be done at a small expense?—Yes, at a small expense.

654. Do you think the nation would be justified in incurring a small expense of that sort?—Yes, I quite think that it is within the reasonable scope of the country to do it.

655. And you think that would be as practical a way as any other of obtaining a number of well-taught practical foresters?—Yes, I think that would really be the best way to get the kind of men you want.

656. How many practical working foresters do you have in the forest?—We have 18 woodmen who are perpetually in the woods, each upon his own beat; the forest is not so large but that when one kind of work was going on at one end of the forest, it would not be too far to go to the other to see another kind of work. In that way they might stay a year and receive small wages, or come for nothing, and if they would put their hand to the spade or pick-axe they would learn a great deal by being dotted about the forest; not only that, but they would learn a great deal as to paying and making contracts for all kind of forestry work.

657. What is your system of teaching the young hands that you take on?—In all kinds of work the woodman of the district, when he has special work to do, takes on, or I send to him some young person who is capable of understanding, and a likely person to do well in assisting him in measuring timber, for example, or any kind of work which a forester has to do, so that you very soon find out whether a man does learn, and whether he is of any use, and those are naturally the kind of men we promote.

658. Do you think it is likely to pay in a commercial point of view to plant oak at the present time?—As a rule I should not plant oak exclusively at the present time, nor in any case, except where oak was a specially profitable tree to grow. We used to grow oak exclusively for the Navy, but as now other kinds of wood are also introduced, and as we find we can sell the oak timber for railway carriages and other things, I do not think there is any reason why the value of oak should go down.

659. But you do not see that there is any reason why planting upon a large scale should be recommended as a national undertaking and worked

Mr. *Rankin*—continued.

worked profitably?—It depends upon the soil you have, and upon the scale upon which you want to do it. Where you are in a mining district, where the mines are likely to continue for generations, it is a wise thing to plant timber for their special use.

660. But, in your opinion, is there any reason why the forest service should have a special grant from the nation any more than any other branches of agriculture?—I should say not.

Mr. *Egerton Hubbard.*

661. What has been the average net rent of the Forest of Dean in the last 10 years?—It has been very poor of late years; we cannot sell anything at this moment. It has been actually for the last two or three years a loss; the income from the forest has hardly paid the working expenses, but up to a few years ago the forest did pay very reasonably well.

Mr. *Fuller Maitland.*

662. Have you been working at a loss in the last few years?—Yes, within the last two or three years we have.

Mr. *Egerton Hubbard.*

663. Do you charge for your 25,000 acres so much an acre?—No, the greater portion of it is common land.

Mr. *Munro Ferguson.*

664. Do you not think the time required for the growth of timber is the reason why it is less planted than it otherwise would be?—Amongst private individuals that is so continually.

665. The question was asked you, if you thought there was any reason why the State should interfere in forestry rather than in agriculture; does not the fact that it takes two generations or more to grow a crop of timber, tell very much against the encouragement of timber growing?—It tells very much against the encouragement of timber growing, no doubt; but I concluded from the question that was asked, that the State lending money would require interest, year by year, until the timber came to maturity. Well, it appears to me that a man might just as well spend his own money.

666. Under certain circumstances, would it not be advisable for the State to intervene where the land was suitable?—If the State find the money, and require interest for that money year by year until the crop came to maturity, I do not think you would find any proprietor applying for the money; if the State would wait for the return until the crop was ripe, and then have a proportion specified beforehand returned out of the profits of the future growth, then it would be another matter; but, of course, no private proprietor would, in these days especially, be likely to ask for money to plant his land upon which he had to pay interest for 10 or 20 years without getting any return.

667. Do you think much land might be occupied by trees which is quite idle now for want of individual enterprise in planting it?—There is a great deal of land which under timber would be better than anything else; some of the hills in Scotland grow very poor pasture, but they would

Mr. *Munro Ferguson*—continued.

grow very good timber; still it would be difficult to give the requisite nurture for one or two generations, and no revenue coming in from it.

668. Have you formed any opinion whether in Scotland the State might promote the growth of timber?—I think the same objection I mentioned just now would hold good there, because it would be planting land which makes very little return indeed now, a nominal rental almost, for which the owner would have to pay all the time the timber was growing, unless, as I said before, an arrangement was come to by which the State should assist in planting the trees, and eventually of a specified proportion of the timber or value being returned to it, as it was cut and brought to market.

669. I suppose our system of forestry education would not work for both England and Scotland?—Yes, I think it would; I think the climate of Great Britain is very much alike for timber.

670. You think one establishment would suffice?—I think one establishment would suffice, because the individual foresters could learn in their own immediate neighbourhoods more or less the practical part of it after they had got the information of the higher kind.

671. I gather that you would make forestry a specific subject in board schools?—I should like to see it, because it would be a useful thing; you have a great many subjects taught in board schools which it appears to me are not very useful, and you might make a useful subject of forestry.

672. Are you acquainted with Scotland?—I am a Scotchman by birth and property.

673. Is there any establishment in Scotland, do you think, which could have a branch added to it for instruction in forestry; the great difficulty would be to induce people to go there from the South of England, would it not?—There would be that difficulty; but I do not see why forestry should not be attached to the Professorship of Natural History in Edinburgh and Glasgow, and also, there are institutions in Inverness, and Aberdeen, and St. Andrews', in which forestry might be brought in.

674. But still they are all distant?—Yes, they are.

Dr. *Farquharson.*

675. I think you say that the Forest of Dean has diminished in size during the last few years?—No, not for the last 300 years, but the original perambulation of the Forest of Dean was treble or quadruple what it is now; for example, there is now no part of the forest which runs within 10 or 12 miles of Gloucester, whereas in earlier days Gloucester Bridge was the boundary on that side; the forest ran from Gloucester Bridge, and then round to the Wye alongside Herefordshire.

676. Is there much planting going on there now?—Most of the land that is fit for anything is planted; much of the country is required for the coal and iron works; you require a good deal of open space for that.

677. Do you get a good sale for what you cut down?—At the present time nothing at all hardly; we used to have a good sale for what we

Dr. *Farquharson*—continued.

cut; but of late, owing to foreign competition, prices have been cut down, and I cannot get half what I got seven or eight years ago; in fact, we have now charcoal wood, and wood used for chemical purposes, which is utterly unsaleable. I think the other day I sacrificed about 100 *l.* worth of that timber. I could not get half the cost of cutting it up.

Mr. *Munro Ferguson.*

678. Do you manage your woods upon commercial principles?—Yes, entirely.

679. Does the Government use foreign timber in preference to yours?—It uses iron principally now. Oak is the best wood for ships, but there are some lighter woods which are used for backing, such as teak.

Dr. *Farquharson.*

680. You suffer principally on account of foreign competition?—The foreign competition would not be so great as it is if other trades were livelier, because there is so much shipping about which is idle, and which can bring in timber, which tends to keep back the value of timber, as well as other things, and now we find in the forest that people send off a shipload of coals, say to Spain, or to the south of France, or somewhere within reasonable distance, and load back in timber; in fact, they get timber as part payment for their coals.

681. But the Committee have had evidence which seemed to point in this direction: that wood was sent to this country because we do not produce sufficient for our own consumption, and that the management of our woods was so bad that the quality was deficient; and it was suggested that scientific management might remedy that state of things?—It might affect it to a certain extent, but before the present depression there was a large quantity of wood imported which could only have been produced from foreign countries, such as large fir, which this country had never produced; but a great deal of land has been planted with them since, and in course of time they will be of some value, but as long as it could be introduced at a comparatively low price from the Baltic it did not pay to grow it here.

682. You would agree, perhaps, with Lord Bathurst, who said that he would not be in favour of using home-grown timber for building houses?—I do not know what the reason is, but upon our own property I have long given it up. I do not mean to say I should not use our own larch, but then you cannot get it big enough; the moment it is big enough you turn it into money, and the same would apply to spruce; but many people have given the home-grown timber a bad name by using sapling oak, that is to say, immature. When a friend of mine was building farm buildings a few years ago, he roofed them with sapling oak from his own estate. I told him he would regret it, and he did, for in 15 years he had to re-roof it; the worm got in and destroyed it.

683. You afford a forest school for those who come to you?—Yes, we train them up ourselves; they are very few, but now and then we spare one or two to go to those who want them.

Dr. *Farquharson*—continued.

684. Do you think you could turn out in that way from your place men quite competent to take the management of woods?—Yes; I have sent out several who were perfectly competent to manage every branch of forestry; but then we do not, as a rule, take sufficient pains with all. We could do it with all if it were wanted, but, practically, we only take sufficient pains with those we want ourselves.

685. Do you think those men would be better adapted for their profession if they had attended elaborate lectures upon botany, entomology, geology, and chemistry?—No, I do not think they would. I do not think geology and botany would be of much use, although the geology would be of some use, because that has to do with questions of soils.

686. Would it be possible to develop in the Forest of Dean something in the shape of a large school; would you be prepared to take 30 or 40 young men every year, and turn them out in that way?—It would be practicable; but I do not think it would do just at present, because there is a very strong feeling against the importation of strangers into a district where there is not sufficient work even for natives. Individuals might come and be taught, but I think if you went to the extent of having 40 or 50 young men in the year, they must do a great part of the work without pay which is already done by those who are paid.

687. Would not that apply to any sort of technical labour?—In the ordinary way, if you cannot give the population work they emigrate; but at the present there are so many people wanting work everywhere, and as long as that is so you could not do it to the extent you speak of; half-a-dozen might do it very well, but when labour is not very plentiful, as it is not now in the Forest of Dean (because the trees have got to that age that they do not require much labour), you could not introduce much labour without doing that which was prejudicial to the neighbourhood.

688. But could not some others come down and look on at what was being done?—Yes, any number might come and look at what was going on.

689. I suppose a short course would suffice; there is nothing very mysterious about it?—Yes, there is no mystery about it.

690. Would you say a couple of months' course would suffice?—There are different operations which have to be conducted at different times of the year; they might come down at different times of the year, and we should give them two or three months, during which they would see what was going on.

691. And as you grafted them in the general principles, they would be quite able to adapt those principles to the differing circumstances of different countries?—Yes, I think so.

692. I think I understood you to say that there was not sufficient inducement in this country to tempt young fellows to go through a large and expensive course of forestry?—I do not think there is, because the system of planting is not the same as in other countries.

693. With

Dr. *Farquharson*—continued.

693. With regard to Mr. Munro Ferguson's question, it would be no use planting trees for which there was no demand?—I think that landed proprietors who could spare the land would always be wise in planting, because after a few years you can always get something, and it is not difficult to get rid of the trees if you want the land; but you should not plant valuable land.

694. But taking Scotch proprietors, are they not engaged in a much more remunerative enterprise, viz., sport?—But much of the land would afford both together.

695. You cannot have grouse and trees together?—You can have trees and black game.

Mr. *Munro Ferguson.*

696. Does not it come to this, that many proprietors will turn all their land into pasture, because they get the return in year by year, and they get it at once, whereas for timber they get no return for a long time?—I am in favour of planting timber if landed proprietors do not object. I do not plant a great deal upon my land, because I have not a great deal of it, but what I have does very well.

697. Judging from your evidence there is very little inducement, you say, to plant, because in the Forest of Dean planting is not productive enterprise?—It is not at present.

698. Have you any hopes that arboriculture will ever become a remunerative pursuit in this country?—I think it will improve as everything else will, I hope, improve.

Mr. *Mark Stewart.*

699. I understand you to say that the only reason you object to the formation of a school of forestry is that we have not scope enough in this country?—You have not scope enough in this country to employ the people after you have educated them.

700. Is it not the fact that we have about 2,500,000 acres of woodland in this country?—That may be; but it is very much scattered; if you have one man whose time is not very much taken up in woodland he might devote a portion of that going round from place to place and looking over it for others.

701. If he were properly educated would he not be a very valuable person in the country now, if he would only go from estate to estate to give advice?—It would no doubt be an advantage, but I should say that you would not have enough of these people to make it worth while to have a school of instruction especially for their purpose.

702. You would admit at the same time that there is a great deal of ignorance upon the subject at the present time?—I admit that. I admit the desirability of more education to remedy that want; but I think you can effect that by having places where lectures are given, and places like the Forest of Dean, where practical operations could be seen a great deal better than by having an establishment which you could never fill, because 2,500,000 acres are not enough to keep up a school of forestry, or create the demand for it.

703. Could you see your way to create a school

Mr. *Mark Stewart*—continued.

in the Forest of Dean which would supply the country with sufficiently well-educated men to give a further impetus to the knowledge required for the proper appreciation of this subject?—I am not sure whether you could do that, because you would want a class of men who is not to be found as yet, and there are a great many things wanting. No planting can be done in the Forest of Dean, and there is no nursery work, which is the very beginning of it; you can show, of course, the preparation for that, and buy plants, but then they must go somewhere else to see the seed; but you may do the practical part of it, less the raising of the seed and the preparation of the ground for it.

704. Do you think that the theoretical part of the education could be imparted under any existing organisation that we possess at present?—I do not know, as I said before, what is done at Cooper's Hill; but, probably, there would be sufficient education to be got at first from the existing staff, which would go a long way to fill up the gap.

705. You probably have not read the evidence given before the Committee last year?—No, I have not.

706. The conclusion that the Committee arrived at was, that it was admitted generally that there was great need of a school of forestry of some description, but how to arrive at that was to be the after consideration of this Committee; do I understand that you rather throw cold water upon that suggestion?—I do not throw cold water upon your having places where sufficient education can be got; all I mean to say is, that I do not think there is sufficient scope for the people in this country, after you have trained them, to afford employment for them.

707. Still the training would not amount to so very much. If the intending forester were an educated man, and underwent two or three months of classes, could he not gain a great deal of information in regard to forestry, climatic differences, and so on?—Yes; no doubt he would.

708. If there were a school of that character affiliated to some university, would that meet, in your opinion, the necessities of the case?—I think it would suit the necessities of the case extremely well; even less than that would do; because if the professors who are lecturing already in other subjects are also able to lecture upon forestry, he could carry on both courses.

709. You would see an advantage in that?—Yes; I would see an advantage in that; I quite admit that. What I mean is that there is not sufficient scope for the practice of forestry in Great Britain to require a special college for it, and that the great want in this country is a place where practical foresters, bailiffs, woodreeves, and that class of men, could learn the practical part. They cannot afford to go to these colleges; therefore, as I suggested before, if they could be taught in schools of any kind a certain amount of theory from hand-books of forestry, they could learn the actual practical part of it by going to the woods in the neighbourhood, and seeing how they were managed; and going where they could to a Royal forest,

Mr. *Mark Stewart*—continued.

where they could see the practical part on a larger scale.

710. Therefore, comparatively few persons had the advantage of this instruction, such as factors and land agents, that would clearly meet the want?—Yes; and they could teach their underlings.

Mr. *Farquharson.*

711. You say you train all your woodmen; do you train them because you cannot get them trained, or as a matter of convenience?—It is partly a matter of convenience and partly because they are with us, and learn our ways.

712. Do you think that if a system of apprenticeship were introduced, your department could employ and partially pay a certain number of young men as apprentices?—It could be done.

713. Without extra expense?—It could be done without great expense.

714. You would be employing now a number of men who would not be altogether skilled foresters?—Yes; we have scores of unskilled labourers, as we call them.

715. It might be that landowners, or people owning woods, might like to train young men in forestry; if they sent them to act as apprentices in your department, upon paying part of their wages, could the department pay the rest profitably themselves?—They might occasionally; not always, because really the amount of work which is done in the Royal Forest now, owing to the want of sale for timber, and having no planting to do, is comparatively little, and we do not require to take on extra hands. It is a matter of pounds, shillings, and pence, even in that, as in other things.

716. At all events, a small number would not burden you?—A few would not. One honourable Member talks of 30 or 40 at a time; that would have the effect of dispensing with men who practically get their living there, and that would raise a great deal of ill-feeling in the neighbourhood, where there is a great deal of labour already at disposal, which cannot find employ. If I wanted to make a road to-morrow a mile long, I have no doubt I could get 700 or 800 applicants in the course of the day; so that, at times of this sort, you cannot fairly displace people even for a good purpose.

Mr. *Biddulph.*

717. Do I understand that you do not follow the same system in the Forest of Dean as they do in the New Forest, of planting new species, and throwing over other species?—That has been done to the full extent that the Forest of Dean will allow, because there is a mining population there now, and all the land which is not required for mines or spoil banks, and so on, is already occupied by trees.

718. Your trees are mostly young trees, are they not?—Yes; with the exception of three or four plantations which date back some 130 years, all the rest have been made since 1808.

Sir *John Lubbock.*

719. You stated that you thought in this country we had not a sufficient opening for a general forest school. At what do you estimate the amount of acreage under woodland?—One honourable Member talks about rather more than two million or two million and a half acres scattered over Great Britain; but many of those are in such different quantities that it is impossible to say how many men you would require; one man might very well look after 2,000 acres of woodland and manage it very well, while another man, who was equally skilled, might have only 200 acres, and could get no more to look after, because his employer had no more; he could be employed as a farm bailiff, or in some other way in which he would be of use, so that one could not say what number you would require.

Sir *John Lubbock*—continued.

720. Taking the amount which is generally given, which is from two million to two and a half million acres, the difference between their being well or badly managed would involve a great deal more expense than the cost of a school?—Yes, but then you have the point which has always been a stickler with me. You could only have a limited number of head men if you could divide them equally; the man whom you really want is a practical man.

721. The two and a half million acres are divided between a large number of owners, because there are a great many gentlemen having a small number of acres, and the people might be divided up to manage them?—The head man would require to have so many assistants under him to do the manual work, and he would have very little to do to look after them, because you do the forest work at certain periods of the year, and only on certain plots in rotation.

722. But take a gentleman who has 500 acres of woodland, he has a head man to look after it?—Yes, but he has to look after other things besides.

723. But would not that man be worth to him at least double if he had had a certain amount of training?—Yes, he might. Many gentlemen gardeners are their head foresters as well if they have a few hundred acres to manage. If the man had had a certain amount of practical training he would be more useful to his employer, but then he would not be a man who probably could have afforded to go to college.

724. This being the case as regards Great Britain, we have in India enormous tracts of woodland?—Yes, but I assume the general system of forest management in India would be as different from that in this country as light from darkness.

Mr. *Munro Ferguson.*

725. As we have been told, those who go to the forests of India have been trained in Nancy, where the system is also different?—That is so.

Sir *John Lubbock.*

726. Then, again, in the Colonies there is an enormous amount of woodland?—Yes.

727. Do not you think, considering all those facts, that we have as great a need for a forest school in England as they have in any other country?—I think that whatever you could teach them with regard to forestry would be of use, but it would not be of practical use; it would be of use rather theoretically than practically.

728. You

Sir *John Lubbock*—continued.

728. You are aware that we are the only country which has not a forest school?—I believe so.

729. Do not you think we should be doing right in laying down some means for a system of forestry instruction in this country?—Yes, no doubt; it may be a crotchet of mine, but I think it would be more useful for a man who is going to India to go to Nancy, where he would learn foreign languages in addition. He can get forest instruction there, and he can also learn French or German, which would be of more use to him than the little insular knowledge he could get in England, which he really had before.

730. But the Committee have had it stated to them that the system of nomenclature which we have in England, and the system of law and other things being so different at Nancy, the India Office thought it better to give the instruction in our own country?—No doubt one's idea would be modified upon these points if one knew more about them.

731. Are you in a position to express any opinion as to the management, generally speaking, of woodlands in private hands in this country?—Just as one goes about and sees it; and I must say that I think as a rule they are better managed than people imagine. There are, however, various things which might be improved in every locality, which the teaching of a head forester at schools, or which an employer who knew about the matter would put right; I quite admit that it would be a very good thing if that could be improved.

732. Then your impression generally, if I understand you rightly, is that it would be a considerable benefit to have a system of forest instruction, but you would rather dovetail it on to existing institutions than have a separate school?—That is my idea; I do not want to throw cold water upon the extension of forest instruction, but I think it would be a mistake to start a system of forest instruction by itself, and therefore I would rather connect it with an existing institution.

Sir *Richard Temple.*

733. Are you acquainted with the school at Cooper's Hill?—I am not, but I am acquainted with Colonel Pearson, who has come to the forest upon more than one occasion, and with the French professors who came over a year or two ago, and who came to the Forest of Dean.

Mr. *C. Acland.*

734. I understood you to say you thought that something might be done by way of instruction in the board schools?—You have so many things to be of practical use, which might just as well be taught in the national and board schools as those which are now taught; so many other things are taught which in my humble judgment are not of much use.

Sir *Richard Temple.*

735. But how could board schools teach forestry?—I do not mean that they should teach forestry, but that forestry books should be there for the pupils to read. Any well-educated schoolmaster, and they are really very well educated, in fact, very often too much so, might read the books.

Sir *John Lubbock.*

736. But, putting aside grammar, what do you think is taught in board schools which is so useless?—In some of the board schools with which I am acquainted I think a great deal of poetry is crammed into children; when a boy is 12 or 13 years of age, when they are going to put him underground, where he will never do anything in his life but dig coals, and will never see a book again, they might, I think, put something more useful into his head than poetry.

Sir *Richard Temple.*

737. But are you aware that at the metropolitan board schools the principal trees, and the uses of trees and so on, are taught by object lessons?—They may be in the metropolis, but they are not taught in the country, to my knowledge.

Chairman.

738. Have you considered the Forest of Dean as being a place of education for forestry, either by itself or in connection with Cirencester; and I would ask you whether you consider that the operations there afford a sufficiently varied course of instruction, because, as I understand, the principal operations are in thinning?—Yes.

739. So that you would have a great deal of experience in thinning, but not sufficient experience in the earlier stages of the growth?—No; information on those points would have to be supplied by some other means.

740. The Committee have had evidence from Cirencester to say that they could extend their nursery ground to make it sufficiently large?—We do very little in that way now, because out of 25,000 acres, about 15,000 acres are covered with timber, the rest are covered with cottages, mines, spoil banks, and other things which afford no scope for planting.

741. But I suppose the authorities would give every facility to the students to come over for a day to receive practical instruction?—Yes, they have come over already; one party came over for a few days, and I deputed a man to enable them to see everything, and to take them all over the forest; I was not able to be present myself.

Mr. *C. Acland.*

742. I suppose what you were saying about board schools does not go very much beyond quickening the faculty of observation with regard to all kinds of botanical facts; but I should like to ask you, do you think there is sufficient prospect of progress in matters concerning scientific forestry to justify the endowment of a professor; I do not say a professor for teaching a class of men, but for research?—I should hardly say there was. I confess I have not given the subject any particular attention, but I do not think so. I may say, however, as I said before, I do not wish the Committee to think that I want to throw any cold water upon the subject of forestry, with which I have been acquainted for

Mr. *C. Acland*—continued.

40 years; but looking at things as a practical man, I do not think there is sufficient scope in this country for the raising up of a school of forestry, when very probably two-thirds of those coming from it could never find employment afterwards at any remunerative rate of pay, but that a great deal might be taught to those who are to be of use in the profession of forestry, higher or lower, according to whether more or less scientific knowledge was required; I quite admit that if you can give a knowledge of forestry to them without going to any great expense, which they could never pay, it would be an advantage to them.

743. The class of men who are to be land agents, or likely to manage their own property, and in that way are likely to have a certain amount of forest to look after, might gain something by scientific teaching in connection with such an institution as Cirencester or Downton?—Yes, that is perfectly true.

744. And they might gain something by the illustration afforded by the Forest of Dean?—Yes.

745. Beyond that you do not think we can do very much to encourage a knowledge of forestry?—I do not think you can do very much to encourage a knowledge of forestry. There is one subject in connection with the Forest of Dean which is not generally known, but I found it in operation when I went there, and I have kept it up carefully to the present day; that is the transplanting of oak trees of all sorts and ages where you can do so. There has been a record kept from the early part of the century, showing that in every case where trees have been taken up, no matter whether they were seedlings or 20 years old, and transplanted and replanted, they have always grown double the size that the others did, after they had recovered from the effect of being lifted out of the ground; it is a kind of cultivation of the oak tree that everybody does not know; and it is of great value to anybody who has to know that, because he make use of his thinnings by lifting them and transplanting, instead of cutting them down, because they are too small to make use of.

Mr. *Egerton Hubbard.*

746. Do you cut round the trees that you are going to transplant, first?—No, I have taken up trees 25 years old, simply taking them up in winter and putting them in some other place.

747. Taking a very large ball to them?—Taking no ball to them at all, simply taking them up in the winter.

748. That would not apply to hollies, would it?—I am speaking of oaks. It has been practised in the Forest of Dean since the beginning of the century. It is a very curious fact that the smallest tree that was transplanted in 1808 is double the size of the largest oak that was measured at the same time and not transplanted, although it was smaller at first.

Sir *John Lubbock.*

749. Then according to that, I understand you, all oaks ought to be transplanted because they will grow larger?—Speaking within reason, the more you transplant them the better, when they are young. I have trees now which have been lifted five or six times, and they are all going on very well; only a few of them have died. I have been very much struck with this: in the year 1860 or 1861 I wanted to know what was the cause of these trees having been growing so much faster from having been transplanted, and I selected a dozen growing within gunshot of each other, all seedlings. I knew they never had been planted; I took up six of them, marking them in a particular way. I took them up by digging them out of the ground, and I immediately replanted them in the same holes. I measured them all, taking the circumference of each tree six feet from the ground. In the first seven years the trees that had never been touched at all went ahead very fast, and the others grew very little; after seven years the others began to recover, and I think in this year, 1887, the six trees that were something like eight inches in circumference will now, in the aggregate, be bigger than those that were never touched at all; thereby showing that the mere fact of lifting an oak tree and putting it back into the ground and re-planting it, without doing anything else whatever to it, is a valuable treatment for an oak tree. People ask why this should be so. I say because if you have a thousand trees that you have to cut down because they are too thick in your plantation, do not cut them down, but lift them and place them somewhere else or make a clump of them.

750. Would there not be many other pieces of information that the students might acquire of a similar description?—Yes, no doubt there would.

751. Would you not, therefore, be inclined to modify the very discouraging observations you made just now with reference to the endowment of a professor of forestry?—I only say I do not think there would be enough people requiring that education to make it worth while to establish a college specially for its study.

752. But you went on to say that you did not think it would be desirable to endow any person whose function it should be to make any experiments with regard to forest culture?—I do not think I said that; I think the question had relation to research. With all my experience I do not know anything about the question; I only know that the removal of oaks is a very useful thing, but that is a knowledge which can only be acquired by practice.

753. Do you draw any distinction between experiment and research?—They are very much the same in one sense.

754. Do you still wish your answer to stand, that you do not see in what way advantage would arise from the appointment of a professor who undertook research into questions of forestry?—I think that a professor who would give forestry lectures in conjunction with others would do equally well, because I do not think we have sufficient requirement for a professor of forestry alone who would do nothing else. Unless it were added to something I do not think you could keep a professor of forestry going; he would be a professor without pupils altogether very often.

755. But Mr. Acland asked you whether you thought there would be any advantage in the appointment

Sir *John Lubbock*--continued.

appointment of a professor for the purpose of research, and you replied to that that you did not think so; since that you have given the Committee some very interesting evidence from which it appears that from your own observations a very large amount of very interesting information respecting the treatment of oak trees has been obtained by yourself whereby you clearly show that we have not reached the limits of knowledge in reference to forest trees?—Certainly not; but then the question is, whether it would be remunerative to have a professor charged with no other duty than making researches into forest culture.

Mr. H. A. BRITTON, called in; and Examined.

Chairman.

756. YOU are a partner in the firm of Messrs. Richard Shelton & Sons, I believe?—No; I am not a partner, but am connected with the firm as outdoor manager and valuer.

757. They are timber merchants at Wolverhampton, are they not?—They are.

758. I believe you are well acquainted with the woodlands in the West Midland Counties, and in Mid-Wales?—I have a thorough knowledge of Wales, except the extreme north; I know every county in Wales, besides Herefordshire, Worcestershire, Oxfordshire, and the principal timber-producing counties.

759. What is your opinion as to the management of woodlands in those counties?—There are exceptions, of course; but, generally speaking, it is very bad.

760. Would you give any expressions of your opinion as to the management?—There seems to be, generally speaking, no system; no forester is employed, or only in a very few instances. I am acquainted with a great many of the land agents in all those counties coming in contact with them in business, and they are not men who understand the management of woods; and, of course, the workmen, or woodmen, as they call them, have no one to give them instruction with reference to thinning. There is not sufficient interest taken in the woods being properly thinned, and even such a simple matter as that of the fences is very often neglected. In five woods out of every six you go into you find cattle straying into them and injuring the bark, and all that sort of thing, and no regard paid to proper thinning.

761. What is the present general prospect of the timber trade?—I cannot say that there is any prospect at all for home-grown wood in the face of the tremendously low prices of imported timber.

762. In the present condition of the timber trade, what is the most profitable wood, do you consider, to plant?—There are woods grown in this country which suffer but very little by the competition of imported timber, such as sycamores, and I should say the beech suffers less from foreign competition than any other wood that we grow. As regards such woods as larch, and all the firs, we get equally good wood from Norway at half the cost; I do not mean to say that the Norway mining timber, as it is termed in this country, is equal to our larch, but it is equal to, or better, than the spruce, and equal to Scotch fir.

763. Have you any idea of the actual amount of timber imported into this country?—I do not know that.

Chairman—continued.

764. You know the principal sources of supply, the timber countries?—Yes.

765. What are the principal sources?—Besides Norway and Sweden, there are Canada and the United States; from Pensacola and Savannah you get large quantities of pitch pine. In Staffordshire, where I come from, which is a timber-consuming county, as distinguished from a timber-producing county, a tremendous quantity is taken for mining purposes, and I should give it as a rough estimate that nine-tenths of the timber used in South Staffordshire comes from Norway.

766. Do you think, looking at the present large importation of timber into England, there is any prospect of British timber being grown with any chance of profit?—Certainly not, under existing circumstances. That would very much depend upon the state of the woods, or of the other ports that we now get supplied from, that is to say, the cost of getting the timber to the ports is an element; whether it will always be done as cheaply as it can be at the present time is a matter which could only be ascertained by a sort of survey.

767. At present there is no apparent falling off in the supplies from Norway?—Certainly not; there is no symptom of it. The price is going down every month.

768. And the same applies to Canada, does it not?—Yes; although there has been great damage done to the forests of Canada. It is well within my recollection that it would have been once impossible to have seen a piece of Norway timber in Staffordshire, whereas now, nine-tenths of the timber used in the mining districts is imported from Norway or Sweden; the prospect, of course, could be only determined upon a survey of the state of the woods in that country and how they lie for hauling and freighting.

769. Is it not the fact that imported timber has a great advantage over home-grown timber in consequence of the preferential rates charged by the railway companies?—Yes; there is a vast difference between the two. If you will allow me to say so, there was a Committee sat, I believe it was in the year 1883, upon the subject, and an association called the Midland Counties Timber Association were represented before that Committee, and this was the petition, of which I have a copy. It gives the difference in the rates between English and foreign timber.

Chairman—continued.

770. Could you give the Committee briefly any particulars of those differences the memorial states?—Yes. "It will be shown, according to the accompanying list, that most of the principal towns are reached by the ports at a trifle under or at one penny per ton per mile, while, to convey English timber to the same towns varies from 2½ *d.* to 3 *d.* per ton per mile."

Mr. *C. Acland.*

771. From where would the timber come?—Those are the rates taken from the chief timber-producing places; we have a few here, Middleton, Gnosal, Craven Arms, Bromfield, Leominster, and the Hereford district.

772. Does not it come to this, that inland traffic upon the railways costs more than through traffic from the ports to any centre?—There would no doubt be a slight difference.

Sir *Richard Temple.*

773. What is the meaning of being reached by the ports?—Being reached from the ports to an inland town; from Cardiff to Birmingham the rate for foreign timber is 8 *s.* 10 *d.*, while for English timber it would be 16 *s.* 8 *d.*

774. Why is that?—That is the grievance.

775. How do the railway companies do that?—That is what we wish inquired into.

776. But is it in connection with some through rate from the foreign country?—No doubt it would be in conjunction with some other competing freighters, such as, for instance, small vessels taking the timber up to Gloucester, and then boating it in barges along the Severn.

Mr. *C. Acland.*

777. Have you ever attempted to try the question whether that difference of rate for foreign timber, as against English timber, from Cardiff to Birmingham, is not reached by the law of undue preference?—It has never been tried in that form to my knowledge; we have had several actions with the railway companies respecting rates, but they have invariably won.

Mr. *Biddulph.*

778. I am afraid that your grievance is not the only one?—It is not; you will understand it better if I give you a rough idea in this way. I am actually at the present time cutting down timber in Wales, and sending it into Staffordshire, which is costing more in dead expenses, such as carting and hauling to the station, and freighting, than Norway timber is actually sold in Staffordshire for; that will give you some idea, so that, in the face of these figures, I fail to see how you could grow anything in the fir line with any prospect of profit, except, of course, that circumstances between the Swedes and Norwegians may alter; perhaps they are cutting their timber from the most convenient spots for delivery. I know nothing of that, and unless I had been there I should not be in a position to speak about it.

779. Then quantities; their bulk is much larger than anything you can send?—I am told that we have no conception of it.

Chairman.

780. Do you think that, with a fairer adjustment of railway rates, there is a possible future for home grown timber?—Yes, I have been in conversation with agents, who have told me that in their own life-time they have planted larch that has paid them very well; that it has been planted and sold to advantage in one man's life-time.

781. Have you given your consideration to the question of the desirability of establishing a school of forestry, or a system of instruction in forestry; has that come within the range of your experience in connection with your trade?—I cannot say that I have done so; I think that it would be advisable for agents to understand a little more of woods than they do, or the men that are tutored as agents.

782. I suppose you come across agents a great deal?—Yes, all the winter I am in the woods in Wales and in Herefordshire and other counties in business relations with land agents.

783. Do you find that many land agents possess a capable knowledge of forestry?—Very few in all my experience; I think I could pretty well count them upon my fingers' ends.

784. The land agents depend mainly upon their woodmen, do they not?—Yes, they do.

785. Have you found that the woodmen, as a rule, are fairly capable?—It would be difficult for me to estimate that, because very often my business with them is only for a few hours; they are just showing me a little way out, or a little way round the woods, and I am not occupied with them a great time.

786. Because you stated in your evidence that, in your opinion, these woods, generally, were not well managed; do you attribute that want of management to the agents or to the woodmen?—The agents should direct; the woodmen would understand what the district would grow. We get one wood from one county and one from another; you would not expect to find good oak in one county or larch in another or fir in another. You get the best beech in Gloucestershire; whereas you would not get any good beech in Wales scarcely anywhere. The woodmen employed in Wales would know nothing of the growth of beech, for instance; it could not be of any service for them to know anything of it because the timber would not thrive there.

787. Do you think that a more general knowledge of forest management would tend to prevent those mistakes of planting trees upon soils which do not suit them?—Yes, there is no doubt of that.

Mr. *Egerton Hubbard.*

788. You were speaking of Welsh timber costing more delivered in Staffordshire than the Norway timber; why is that?—The expense in the Welsh timber was more than the selling price of the Norway timber.

789. Could you give me the figures?—Norway timber can be bought now in Staffordshire at about 8½ *d.* per cubic foot; I am not in the foreign trade so that I would not bind myself to fractions, but that is near enough.

790. What

Mr. *C. Acland.*

790. What timber is that *l*—It is what we call Norway pine. I do not know the botanical name of it; it is very similar to our spruce; there are two kinds of it, one which is red and one which is white; they are very similar, and that is delivered in Staffordshire at about 8½ *d.* per foot. Now we are paying 5 *d.* a foot for timber out of Wales, and 3 *d.* for hauling to the station per foot cube, and the cutting down and dressing costs us another penny; that makes 9 *d.*, which is nearly a penny per foot more than the Norway timber is actually sold for; so that if we had such timber growing for nothing we could not compete with Norway timber. I do not mean to say, however, that our timber is not more valuable than the Norway timber.

Mr. *Egerton Hubbard.*

791. Is it of the same kind?—No, it is not of the same kind, because we have not the same kind of timber as the Norway timber in this country.

792. What is the timber which costs 9 *d.* a foot?—The larch and small oak.

793. What reduction upon that 9 *d.* would enable your larch to compete successfully with the Norway red pine?—This red pine from Norway actually passes the stations where we are bringing this larch to; the distance is somewhere about half way, and the freight of the Norway timber from Cardiff to our place is 2½ *d.* a foot, so that it is as nearly as possible half the freight. The Cardiff timber has double the distance, but upon ours we pay 4 *d.* to 5½ *d.*, or double the Cardiff rate. Moreover, the 2½ *d.* would include the delivery to the consumer, whereas the 5 *d.* rate for the home-grown timber does not include that; we have to unload it and deliver it at our own expense.

794. Could you name any sum per foot which would enable your Welsh timber to compete successfully with the Norway timber?—We should be satisfied if we had it at 2½ *d.* a foot, that would be the half of what we are paying now.

795. Could you give the Committee any notion of the relative quantities of home-grown and Norway timber which would pass over the lines you speak of; how many loads or standards?—I could not; it does not come within my business to know that.

796. What is the name of the line?—The line that we are now having timber from is the Mid-Wales line, but it is only a small affair; we get a great deal from Mid-Wales and over the Hereford, Hay, and Brecon Railway, but that is now under Midland arrangement. We get a large quantity of timber by Cambrian Railway from Welshpool up to Aberystwith.

797. Probably the secretaries of the Cambrian Railway or the Mid-Wales Railway could tell us the relative quantities of timber of both home and foreign that passes over their lines in a year?—No doubt.

Mr. *Biddulph.*

798. There would not be a large quantity of foreign timber passing over the Cambrian and Mid-Wales Railways?—No, the Great Western Railway Company and London and North Western Railway would take care to keep all the traffic that passed within their reach, but they might get some of it through the Taff Vale Company.

Mr. *C. Acland.*

799. When you say the timber passed through your district at 2½ *d.* a foot, is that equally true of small or large quantities?—It does not make any difference in the railway rates after a certain quantity; it goes in two-ton lots. If you sent by the Central Wales Company two tons of timber, you would have to pay exactly the same rate for that two tons, as you would for two thousands or two millions.

800. Therefore, in your opinion, it is not in consequence of any large or constant trade that the railway rates for foreign imported timber are lower than the home rates?—No; I do not think that has anything to do with it. The rates given on the back of this circular which I have produced, are not now correct, either as regards foreign or English timber, but still they give an idea; there would be slight differences, which, no doubt, the Timber Trade Association, I am authorised to say, would be glad to supply the Committee if they desired them.

Dr. *Farquharson.*

801. It is quite likely, is it not, that foreign competition has reached a highly acute stage?—Yes; I stated a short time ago that I remembered the time when it would have been impossible to find a piece of Norway timber in Staffordshire, and now after conversing with several of the principal merchants and engineers, I find that nine-tenths of the timber used in the mines is from Norway and Sweden.

802. Is that due to a great extent to the ships for return freights allowing lower rates?—I have no doubt that is partly the reason, and it is a trade which had never been developed.

803. Do you think it is due in the first place to the fact that sufficiently good wood, and sufficient of it could not be obtained in our own country?—I am not in a position to say that we could obtain the quantity now required for our mines in England; if I were forced to give an opinion, I should say it could not.

804. That gave it a start, and it has been since developed?—The tremendous demand of 1873, no doubt gave a great impetus to it, but Norway timber was double the present price in 1873.

805. Why should it have got cheaper now?—I suppose it is owing to the cutting down of the freights; the hauling and carrying have been done at so very much less.

806. It is a very good wood, is it not?—It is preferable to our common fir, but it is not so good by nearly 20 to 25 per cent. as our larch. I know the Cotswolds where they grow larch which is 25 per cent. and preferable for mining purposes to Norway timber.

807. Is there not another line in which we are very hard hit, namely, the importation of ready-made doors and windows?—Yes, and as regards oak timber we had no trade for that except for railway wagons, and now that is being cut in America; the Americans have stock specifications which people send out to America, and upon request, by letter or wire, they can supply them from America as quickly as we can, and at 30 per cent. less money.

808. Do you think that the use of wood is declining?—I have no statistics to guide me, but I should

Dr. *Farquharson*—continued.

I should think there is as much wood being used in this country as ever.

809. Do you think that, under better forest management, we could compete with the foreigner by producing a better class of timber?—I have never been abroad so I have not seen their woods; unless I had I could not give an opinion because I do not know how they are situated with regard to position or soil. Our woods no doubt could be largely improved upon. I heard Lord Bathurst giving his evidence; I know his woods, and I do not know any much better.

810. We have had most distinct evidence from witnesses who tell us that the woods in this country are shamefully ill-managed. Now what encouragement is there for anyone to take up the trade of arboriculture when there is no sale for home-grown wood?—I know nothing of arboriculture itself, except that I examine the woods upon estates for sales.

Mr. *Munro Ferguson.*

811. Is your business confined to wood for mining?—No, we buy all classes of timber.

812. Has manufacture kept pace in this country with the progress that it has in others?—As a matter of quality it has, undoubtedly; but as far as cheapness goes we cannot compete.

813. Is the foreign machinery better than ours?—No; I think our machinery is as good as any I have ever seen or heard of.

814. But how do they manage to produce at a less cost than we do?—They have water-power; our power is very expensive, whereas theirs is very cheap, it is all water. They have the wood for nothing or next to nothing, and it does not matter how they waste it. If they come across any little bit of defective timber it can be thrown aside, it does not make the slightest difference to them, whereas we have to make the best of every little bit in this country. When you are paying from 9*d.* to 10*d.* per foot for hauling and freight, you must make the best of it, whereas, in America, it does not matter, you can throw away pieces of defective timber.

815. You can judge of the quality compared with our timber when it is brought home prepared for use?—Yes; I spoke of the quality of our timber in a growing state.

816. What sort of condition is the foreign timber in when put into the market here, as compared with the home timber; is ours more shaken and knotty than the foreign timber?—It is quite a different class, and is used for different purposes altogether. For buildings it is almost exclusively foreign timber that is used.

817. And they do not use any English fir?—I have seen it used upon estates, but we never sell it for building.

818. Do you sell much foreign timber to landed proprietors for use upon their estates?—Yes, and we manufacture joinery for them.

819. Are there any other trees besides beech and sycamore in which we have a monopoly at all in this country?—Our large oak is better than anything I have ever seen coming from abroad for the same purposes, but those purposes are very rapidly dying out. For instance, in our district, coffins used to cut from oak, the finest trees we could get used to be cut into

Mr. *Munro Ferguson*—continued.

coffin boards; they had to be cut on the quarter. Cutting it into quarters and then taking the board off to keep on the quarter as we call it, every time. Now they supply a very good oak for that purpose from abroad, but it is not anythink like so good as our own.

820. Is there any way in which home-grown timber could be developed in preference to foreign timber?—There are endless ways, no doubt; but not, so far as I can see, at a profit.

Mr. *Biddulph.*

821. Has it ever come into your observation with regard to home-grown timber, that it has deteriorated by way of knots and other things owing to bad management?—I am not a very great age, and it takes a tree a very long time to grow, so I cannot say what they were 40 or 50 years ago; but I have been told by practical men who are of 70 or 80 years of age, that there is a great deterioration in the management and growth of the timber compared to what it was in their time.

822. But as a matter of practice, do you find that English grown timber has a great deal of faults, and knots, the result of bad growing and pruning in early times?—Yes, and nailing rails to the trees in hedgerows is another bad practice in this country.

823. So that, in consequence of that, a great deal of the English timber gets blown upon?—Yes, there is no doubt about that. As regards case-making, for instance, elms nearly always grow in hedgerows, so that spruce deal is preferred for that purpose, owing to the elms being so largely nailed and cropped.

Mr. *Mark Stewart.*

824. Is there any natural defect in English timber?—I cannot say that there is, except that cropping of trees forms little black knots.

825. Is it not considered by builders generally that the very name of foreign timber indicates that it is a good deal better than the home-grown?—No, I do not know that they care about that; it is the price that tempts them.

826. Have you read the evidence given before the Committee last year?—I have not; it has not come under my notice.

827. Have you given much attention to those suggestions which were made as to creating a school of forestry?—Only recently; I have heard of it during the last few weeks.

828. Have you talked the matter over?—Yes, I have talked the matter over with several land agents.

829. What is the general result that you have come to?—The general result I have come to is, that very few land agents know anything of forestry, or very little.

830. You think that, if land agents and others holding positions of responsibility upon the different estates of the country, were masters of the subject, there would be sufficient intelligence to bring to bear upon those who are practically working out the cultivation of forests?—Undoubtedly.

831. You heard what the last witness said with regard to affiliating a school, or classes, or lectures to some organised system of education

for

Mr. *Mark Stewart*—continued.

for this subject; would you think that that would be sufficient to guarantee us better information, and a more intelligent application of that information?—That would be very difficult for me to decide in my own mind. If we had this school or schools fixed in certain districts, perhaps they would be only able to get a knowledge of one or two particular kinds of timber.

832. But I rather allude to the theoretical aspect of the question. Suppose there were a school in London to teach the theory of forestry, dealing with climatic changes, and so on, and the variations of soil, not only applicable to England, but to Scotland and Ireland, and even to our Colonies, do you think that would be an advantage?—I think for practical experience it would be very desirable.

833. Would not the theoretical intelligence rather direct the practical afterwards?—I daresay that would be an advantage; it would no doubt stimulate them to find out for themselves the present state and what the woods were likely to be in the future.

834. Do you think there is sufficient scope in the country to have a body of experienced lecturers to give information, and for the country to benefit by that information?—For a limited number I should say there would be.

835. Is it your opinion that a series of lectures such as I have indicated would suffice to bring out a good deal more practical information and to give the country the benefit of it?—It would bring out more undoubtedly; I do not say that it would be adequate.

836. Could you suggest any other means towards that end?—If I suggested anything it would be simply students going to the different counties, for instance, going to Gloucestershire to see the beech growing there, and the larch

Mr. *Mark Stewart*—continued.

upon the Cotswolds, and the elms in Worcestershire; those are the chief districts for the kinds I have enumerated.

Mr. *Biddulph.*

837. With regard to skilled woodmen, in cutting timber you have your own staff of men, I think?—They are not at work regularly for me; I employ my men as I want them, but generally the same gangs.

838. Are you not able to find skilled workmen in any part of the country you go to?—No, I send them great distances. I find that the most skilled workmen with regard to felling timber are in Herefordshire; I have found some very good ones in Northamptonshire; but in Derbyshire, Leicestershire, and Lincolnshire they are very bad workmen.

839. And of course one of the objects of a school of forestry would be to improve that system?—The agent would direct if he were selling the timber himself, or if it were standing it would be a question for the buyer; but very few agents know anything about the felling of timber.

Dr. *Farquharson.*

840. I think you said that in Canada, where the wood comes from, it is got for almost nothing on the spot?—It must be, to be sold at the price it is.

841. You do not know whether that is in consequence of its being naturally grown instead of being artificially planted, therefore you do away with the expense of planting?—There is that kind of wood in this country; I have seen splendid plantations of beech in Gloucestershire which has been self-planted.

The Honourable G. LASCELLES, called in; and Examined.

Chairman.

842. HAVE you been for some years engaged under the Woods and Forests Commissioners in charge of the New Forest?—Yes, I have been for seven years in charge of the New Forest and other Crown woods in Hampshire.

843. What is the present acreage under woodland in the New Forest; there is some proportion under heather, but what is the proportion under trees?—The plantations of all kinds amount to 17,600 acres, and the old woods of which we have no record of the plantation, that is to say, those which had come into existence prior to any Act ordering planting in the New Forest, are about 4,600 acres.

844. What are the trees?—The older woods are entirely beech and oak; the old plantations are entirely oak, because by Act of Parliament nothing but oak for the use of the Navy might be so planted; in the plantations of middle age, from 50 to 75 years old, there is a certain proportion of Scotch firs which were planted for nurses, and which remain when the oak is felled. In the younger plantations there is a considerable proportion only planted with Scotch fir where the soil is too bad to admit of planting oak.

Chairman—continued.

845. What number of men do you employ?—In the New Forest my woodmen number 17.

846. Have you under yourself an experienced forester?—We have three assistants of experience, and the woodmen are more in the position of foremen under them.

847. What kind of men are they; are they experienced men; are they Englishmen or Scotchmen?—They are Englishmen.

848. And you find no difficulty in getting capable men as woodmen?—No, not much; we promote the better class of our labourers generally; those men who have been upon the plantations all their lives and have a practical acquaintance with all the work which is being done. Those who are more intelligent are generally promoted to become woodmen.

849. So that your men are learning under experienced foresters?—Exactly.

850. Do you think that the New Forest would be a good place for an experimental school, or at all events, for instruction in experimental forestry?—There is no doubt that there is a very great deal of interest in the New Forest now, but I think it would be almost the worst

Chairman—continued.

place in England for instruction in a school of forestry, because all scientific operations in forestry are interdicted by Act of Parliament, and it would not be possible to carry out the operations which planters would want to learn; felling is forbidden, and planting is forbidden, so that everything is at a deadlock.

851. Have you read Professor Boppe's views attached to the Report of the Committee of 1885?—Yes, I have.

852. Do you concur with those views?—I concur with some of them, but M. Boppe was hardly in the forest long enough to make his Report complete, I think.

853. Downton College is in the neighbourhood, I think?—Yes.

854. Do the students make any use of the forests?—They come sometimes, but only I think for botanising purposes.

855. After what you have said it would be hardly desirable for students to take the New Forest as an example of management?—Hardly. There are examples of plantations from 5 to 50 years old which they could learn from, but they could not learn anything about planting, nor of the natural reproduction of woods upon a large scale such as might well be carried on in the New Forest, nor could they learn anything in the way of planting heath land, nor of clearing or renewing nature plantations.

856. Have you discussed the subject of a forest school?—I have heard it discussed.

857. What are your views upon the subject?—I cannot but think that it would be a good thing that land agents should have some means of educating themselves in forestry better than they can now; but I can hardly see how what are called woodmen, say men at 30 *s.* a week, are to avail themselves of a scientific school, and I hardly think that on most of the estates in England they would have any scope for the

Chairman—continued.

exercise of the knowledge they would acquire at a scientific school.

858. Still you think it would be desirable that there should be some means of collecting and of giving information generally upon the subject of the management of woods?—Yes, I think it would be useful.

Sir *John Lubbock.*

859. You stated that upon an ordinary gentleman's estate there would hardly be scope enough for the exercise of the knowledge, but still there would be an opportunity for the exercise of practical knowledge as to how to carry out thinnings and how to carry out planting in particular soils, and a great deal of practical information of that sort which might be useful?—Yes, I think so. I think therefore that a man who had had a practical education would be more useful than one who had had a scientific education.

860. As you come down in the scale it is practical knowledge that is required; but taking the case of a gentleman with 500 or 1,000 acres of woodland, is it not difficult for them now to find some man who is well trained?—I do not think it is difficult to find a man who is capable of taking charge of such a property as you speak of, particularly where the proprietor pays attention to it himself. I have had an opportunity of observing the woodlands on a great many estates, but I hardly know one where the woods are well managed unless the proprietor pays careful attention to them himself.

861. Has your attention been called to Colonel Pearson's suggestions made before the Committee last year?—I read them carefully last year, but I have not looked at them since.

862. Will you kindly look at them again and favour the Committee with any suggestions that may occur to you with regard to them?—I shall be very glad to do so.

Tuesday, 28*th June* 1887.

MEMBERS PRESENT:

Mr. C. Acland.	Sir Edmund Lechmere.
Viscount Ebrington.	Mr. Fuller Maitland.
Mr. Evelyn.	Colonel Nolan.
Dr. Farquharson.	Mr. Rankin.
Mr. Munro Ferguson.	Mr. Craig Sellar.
Mr. Egerton Hubbard.	Sir Richard Temple.

SIR EDMUND LECHMERE, BART., IN THE CHAIR.

Mr. JOHN MACGREGOR, called in; and Examined.

Chairman.

863. I THINK your address is Ladywell, Dunkeld, North Britain?—Yes.

864. You are Head Forester and Wood Manager to the Duke of Athole, are you not?—Yes.

865. I believe you entered the Duke's service in 1842?—Yes.

866. As an ordinary woodman?—Yes.

867. You had been previously employed on other estates?—Yes, from 1838.

868. As well as in the Duke's service?—Yes.

869. Since 1860 I believe you have had the entire charge of the Duke of Athole's woods?—Yes.

870. Where are the woods situated?—All in Perthshire, between Perth and the county boundary.

871. What is the acreage of woodland which you have under your charge?—About 20,000 acres.

872. What description of trees do the woods principally consist of?—The bulk is larch; five or six thousand acres of larch mixed with spruce, and about a thousand acres of oak coppice. The remainder principally Scotch fir. The large larch plantations are principally comprised in the Loch Ordie and Loch Hoishen Plantations.

873. Have you any other description of pinus?—Nothing but specimen trees in policy grounds.

874. You have not the *Abies Douglasii* in your woods?— A few thousand trees; more experimental than anything else.

875. Have you given your attention to the general subject of the condition of woods and forests in Scotland?—In Perthshire; I confined it to Perthshire, because I have never been much out of it.

876. What is your opinion as to the management in Perthshire?—It might be better.

877. Do you consider that the land agents, or the factors, as they are called in Scotland, are fairly well informed as to the management of woods and timber?—Very few of them, I think.

Chairman—continued.

878. What, in your opinion, are the subjects on which factors and woodmen are deficient?—They are deficient in the knowledge of what trees ought to be planted on suitable soils, and when thinning out ought to commence; and, in fact, the general management of the woods altogether.

879. What do you think are the special subjects which those who have charge of woods ought to understand; I think you mentioned the soil?—They ought to understand the soils and situations suited for the different varieties of forest trees to be cultivated for profit, and they ought to know the proportions in which those trees ought to be planted, and whether they ought to be planted mixed or pure.

880. They should know, I suppose, something about the diseases of trees?—Certainly.

881. And the insects affecting trees also?—Yes; that is a subject which requires to be very much studied.

882. Will you give us some idea of the system pursued upon the Duke of Athole's estates as regards falling and thinning timber. Do you cut down a certain quantity every year?—That depends very much on the demand. We used to; but we commence to thin as soon as ever a plantation requires thinning, and we thin out the least vigorous trees, the least valuable, leaving the best, generally, until the wood is ripe, and then it is all cut down.

883. Have you a steady and regular demand for the fallings and thinnings?—We had before the gales of 1879; but since then the demand has fallen off, and the price has also fallen off very much.

884. That is in consequence of the large amount of timber that was blown down by the gale; the market has been over-stocked?—Yes, and the depression of the coal and iron trades as well, both together.

885. Do you consider that in Scotland tracts

Chairman—continued.

of waste land can be planted with profit?—I think so.

886. Will you give us some particulars in your own experience of the Duke of Athole's estates as regards profit?—The present Duke has planted recently about 3,000 acres, which is doing very well, principally Scotch fir; and we found that the old plantations afforded very much shelter to the arable land, the cultivated land; and since the plantations have grown up they are very valuable as wintering for sheep; some of our sheep farmers have to send their sheep, their hoggs, as they call them, 100 miles away to winter; whereas if there were more woods in the valleys they would not require to send so many away that distance.

887. Can you give us any details of the average value per acre of yearly falls and thinnings?—Not of yearly falls; but I could give you pretty accurately the value of a plantation of 366 Imperial acres of larch planted in 1817, which I had occasion to count a few years ago. The mode I adopted to value it was to measure an acre here and there, through the wood. In all there were 17 acres measured. The number of trees per acre was about 180 to 190, and the value would be about 40 *l.* 5 *s.* per acre. That was the average over the whole. The acres on the lower part of the plantation were worth perhaps nearly 100 *l.*; and at the top of the hill, with 1,000 feet of altitude, the acre would not be worth more than 20 *l.*; but over the whole the value would be about 40 *l.* per acre.

Mr. *C. Acland.*

888. What would be the lowest elevation? You say the highest is 1,000 feet?—The lowest would be about 300 feet to 400 feet.

Mr. *Egerton Hubbard.*

889. Do you mean it is worth now, to cut down, 40 *l.* per acre?—Yes.

Mr. *C. Acland.*

890. That is standing?—Yes; for the wood merchant to cut it himself, and do everything; the proprietor would have that.

891. Clean cut?—Yes; it is not yet at maturity. It will be more valuable. That is the present value; but it is not yet at maturity. It is not fit to cut.

892. That is the present value, assuming a clean cut?—Yes.

893. But that is not the value at which you would put it if you were going to take part of it away and leave part standing?—No.

894. You could make more if you tried?—We should pick out the worst trees and leave the best.

895. You think you might make more of it?—Yes.

896. If it were to be valued for sale of the property would you value it at more than that?—I do not understand.

897. You put the timber at 40 *l.* an acre; that is, if the timber is to be sold and cut down this year?—Yes.

898. Supposing the property were going to be sold, would the timber then be valued at 40 *l.* per acre?—I should think so.

899. You still assume that it would be cut

Mr. *C. Acland*—continued.

down this year; do you consider that there is an increase of value still in the timber, that it may be more valuable at a future day?—Yes. If the property were to be sold I do not think the present purchaser ought to pay any more than it was worth at the present time.

900. Do you think you can get anything more than the present value, without making a clean cut, so that the remaining trees shall grow into greater value, so that you can get more than 40 *l.* a acre?—Yes; I think if it were managed until the best trees were at maturity it would bring more money.

Mr. *Egerton Hubbard.*

901. Has this plantation paid anything at all since the year 1817; have there been any thinnings taken away?—Thousands of pounds worth have been taken away.

902. What is about the average annual value for the last fifty years?—I could not say that, because I had not the management of it all the time.

Mr. *Munro Ferguson.*

903. Has there been any return from pasture?—Yes. Before this was planted the pasturage was let for 5 *l.* It is now let for 15 *l.*

904. The annual value of the 366 acres was only 5 *l.* a year before it was planted?—For pasture.

Chairman.

905. Then you consider the larch has really improved the pasture?—There is no doubt; because it has killed the heather, and grass has come up instead.

906. I daresay we shall return to this subject; but I will ask you now whether you have given your attention to the question of schools for instruction in forestry?—Yes, I have.

907. What is your general view of the question?—At the present time there is no means for a young man to learn anything about forestry but to go about to wood foresters and work as a day labourer. The Highland Society have of recent years introduced examinations; and they also offer premiums for essays on subjects connected with forestry.

908. I think you are one of the board of examiners of that society?—Yes.

909. Are Mr. Thompson and Mr. McCorquodale, who are here, also members of that board?—Yes.

910. And Dr. Cleghorn is the other member?—Yes, those are the examiners in practical forestry; there is also an examiner in botany.

911. Perhaps you will give us the qualifications you require from the candidates?—They are supposed to have a thorough acquaintance with the details of practical forestry; a general knowledge of the following branches of study so far as these apply to forestry: The outlines of botany (that, of course, we have nothing to do with as examiners in practical matters; there is another examiner for that); the nature and properties of soils, drainage, and effects of climate; land and timber measuring and surveying; mechanics and construction as applied to fencing; draining, bridging, and road-making; implements of forestry; book-keeping and accounts. The examinations

Chairman—continued.

examinations are open to candidates of any age. Then the syllabus of examination in the science of forestry and practical management of woods consists of: (1) Formation and ripening of wood; predisposing causes of decay; (2) Restoration of woodlands, consisting of, (1) Natural reproduction; (2) Artificial planting; (3) General management of plantations, cropping by rotation, trees recommended for different situations; (4) Season, and methods of pruning, thinning, and felling; (5) Circumstances unfavourable to the growth of trees; (6) Mechanical appliances for conveying and converting timber, construction of saw mills; (7) Qualities and uses of chief indigenous timbers; processes of preserving timber; (8) Management of nurseries; seed sowing; (9) Collection of forest produce; (10) Manufacture of tar and charcoal; (11) Insects injurious to trees; preservation of birds which prey upon them, drawing a distinction between birds which are beneficial and those which are destructive to trees. That is practical forestry. Then there are the elements of botany, the nature and properties of soils, land and timber measuring, and book-keeping and accounts, with which we have nothing to do.

912. What is the mode of conducting the examination in forestry?—In the first place, written questions were settled by members of the Committee a few days before the candidates were asked to come up to Edinburgh; and those questions were submitted to the candidates when they came to the Highland Society's Chambers, and they were allowed, I think, three hours to answer the questions. Then the oral-examination took place the day after; that occupied two or three hours; the candidates being examined first in practical forestry, and if they failed in that they were not examined any further.

913. The society also gives premiums for approved reports, does it not?—Yes.

914. Is that competition confined to foresters, or is it open?—It is open.

915. It is open to land agents or to anybody?—Yes, we have had land agents and land agents' clerks who come up.

916. Do you think that forestry ought to be connected with the science of agriculture, as a part of agriculture, rather than of any other science?—Yes, it would be more natural to combine them.

917. What is the class of men who come up to these examinations of the Highland Society of Forestry?—They are assistant foresters generally, and land agents and their clerks.

918. Do any actual working foresters, men who absolutely are working in the woods, come up for examination?—No.

919. You have no labourers?—They are young men who have it in view to become foresters who come up, I believe, thinking that the certificate of forestry from the Highland Society would enable them to obtain a situation.

Mr. *C. Acland.*

920. I suppose they have most of them learned what they know by practical work more than by study?—By practical work entirely. They are working men and know very little about scientific matters.

Mr. *C. Acland*—continued.

921. They have not learned much by reading, I suppose?—No, they are doing so now, but then it is very difficult for them to learn by reading, because there is no text-book worth reading.

922. How long have these examinations been instituted?—I am not very sure. They have been in existence for about 10 years, but I could not say exactly.

923. Are they attended tolerably well every year?—Not very well. We have never had more than four candidates at one examination when I was examining.

Chairman.

924. You have read through the evidence given before the Committee of last year, and of the year before?—Partially, so far as I had time.

925. You read Dr. Schleck's evidence?—Partly.

926. Do you concur with the views he expressed as to the locality of the school of forestry and the mode of establishing a school of forestry?—Generally; I do not remember what he says about the locality. Some of the witnesses approve of having a school concentrated at Cirencester or Downton, and others at Cooper's Hill. I do not think that would suit for Scotland at all.

927. Looking at the question purely as connected with Scotland, what part of Scotland do you think would be most convenient for such a school?—I do not think that forestry can be properly taught in a school in class-rooms. They require to have some acres of land. Perhaps if 5,000 acres of land could be got containing proper soil for growing trees that would be sufficient.

928. Is there any agricultural school in Scotland with which a branch of forestry instruction can be connected?—There is nothing that I know of but the Botanical Gardens at Edinburgh.

Mr. *C. Acland.*

929. Have you seen anything of any agricultural schools?—No, never. I know nothing about them; we have no agricultural schools in Scotland; some large farmers take pupils, but that is entirely private.

930. Have you ever had any pupils to farmers come up for examination in forestry?—Yes, but they were young men who intended to become foresters.

931. Or land agents?—Or land agents.

932. You have had them coming up for that examination with a view to their being land agents afterwards?—Yes, they were at the time factors' clerks, agents' clerks; young men.

933. I suppose you would agree with some of the other witnesses that there is hardly a sufficient number of young men anxious to become foresters to justify the establishment of a school on purpose for forestry?—Not at the present time, but then there is no encouragement for them. I think the proprietors must take the first step. If proprietors take any man they

Mr. *C. Acland*—continued.

can get hold of for a forester there is no use in a young man spending time or money if some retired keeper is to be put in charge of the woods.

934. Proprietors must show that they value the certificate?—Certainly.

Mr. *Egerton Hubbard.*

935. Do you mean that they must pay their head forester better than they do now?—Well, I do not say that, but I would say that a forester to be authorised to go and deal with woods ought to be somewhat in the position of a doctor or veterinary surgeon. He ought to be certificated by somebody who can give a certificate as to his competency.

Mr. *C. Acland.*

936. At the present time you do not think that that is so?—I do not think so. I think the proprietors as a rule have stood aloof from the movement. We have an Arboricultural Society in Scotland, but the proprietors have not patronised it so much as they might have done.

937. How is that Arboricultural Society maintained?—By subscriptions from members.

938. Who are the members chiefly?—There are a good many proprietors members, but they do not attend the meetings.

939. Are many foresters members of it?—They are mostly foresters and nurserymen.

940. Do you think it is very important for a forester to have the exclusive management of the sale and the purchase of all matters connected with the woods he manages?—It depends entirely on the size of the woods. If he has a very large charge I think he ought to be entrusted with the whole; if it is a very small estate perhaps that is not necessary.

941. A very small estate would hardly find work for a forester?—No.

942. But where there is the work for a forester you think he ought to be entrusted with the sale entirely?—I think so.

943. You said something just now about the profitable cultivation of woods; of course that entails the knowledge of markets and of the demand that is likely to take place. I suppose the foresters in Scotland have very little opportunity of gathering much knowledge of that kind?—The system observed on the Duke of Athole's property is when a lot is to be cut down, to advertise it, and take offers from wood merchants, and that brings out the real value of the timber.

944. But in order to carry on forestry profitably and with foresight, it is necessary even to plant with some idea of what is likely to be the future demand?—Yes; and to plant what is likely to grow. At the present time I think it would be very injudicious to plant larch extensively.

945. Because you think larch has not become a success?—I am sure of it. There is hardly a larch plantation in Scotland free from disease, but then what that disease is, is a disputed question. I hold that it is caused by an aphis.

946. That of course is a matter for scientific investigation?—Entirely, and for that reason foresters should know a good deal about entomology.

Mr. *C. Acland*—continued.

947. That of course requires special instruction?—Certainly.

948. That can only be given at a school or college?—Quite so.

949. Have you any practical suggestion to make as to how that difficulty can be met?—No. If a school was to be organised and established a person ought to be appointed who could give instruction in that branch.

950. You said there was a Botanical Gardens at Edinburgh; do you think anything could be usefully attached to that institution for this purpose?—There is not a district near Edinburgh sufficiently large where a forest could be established, but there is no doubt the Botanical Gardens would be a very useful place.

951. I suppose in your examination you dealt with the subject of insects, entomology?—Well, not entomology, but insects which are injurious to trees.

952. I suppose something can be done by maintaining those examinations, and making them widely known?—Yes, I think so.

953. Were those examinations advertised much?—No, not very much. The Highland Society advertised them; the secretary advertised them in the newspapers.

954. What fees have to be paid for these examinations?—Nothing.

955. No fee at all?—No.

956. The certificate then is practically a free gift?—It is a free gift.

957. There is no expense to the candidate?—None whatever. The only expense is his coming to Edinburgh to be examined, and the certificate is signed by the president of the society and the secretary of the society, and by all the examiners.

958. Are the questions ever published afterwards?—No, they are published in this little publication in the journal.

959. Is that a journal of the Highland Agricultural Society?—It is not a journal, it is called "Premiums of the Agricultural Society."

960. Do you think that the proprietors, who you say do not appear to appreciate these certificates as they ought to, are aware of the amount of information that is necessary to acquire a certificate?—I hardly think so; I do not think so.

961. You think a little improvement might be made in that way?—Yes, very much.

962. Probably it is your opinion that more is to be done in that general way than by the establishment of a definite school especially for the purpose of forestry?—Yes, but there is no doubt that a definite school would be a very great step towards the better management of woods, and the publication of a text-book, such as they have with regard to Continental forests. We have no text-book; the only book worth reading at the present time, is a little book published by Mr. Grigor, a nurseryman of Forres; its name is "Arboriculture." It is a very useful little book.

Mr. *Munro Ferguson.*

963. With regard to what you say about the appointment of foresters, I suppose you mean the proprietors, in fact, are ignorant about trees,

and

Mr. *Munro Ferguson*—continued.

and not particular with regard to whom they appoint?—Some of them are.

964. A good many of them?—A good many of them.

965. What is your own opinion as to what is necessary in the way of a school or in the way of improving knowledge of timber in Scotland?—I do not see any other better way than the establishing of a school. For instance, no gentleman would take a gardener unless he were a thorough gardener accustomed and well able to grow vegetables and fruits; he grows only annual crops; and when the proprietor sees it necessary to have a proper gardener whose mistakes can be seen at the end of one year, I think it is far more necessary that he should have a thoroughly qualified forester whose mistakes may not be found out for 30 years.

966. What kind of school would you suggest?—Something like what a number of the witnesses have been speaking about; I would suggest a school in Scotland with an extent of 4,000 or 5,000 acres.

967. What sort of fees would you charge?—If it were such a school that gentlemen's sons might go there, I think they ought to pay a fee and perhaps agents, but working foresters I think would be hardly able to afford it.

968. In anything that was established there would require to be a free class which working foresters could attend?—I think so, for poor young men who could not afford to pay a fee.

969. Is there much waste land in Perthshire which could be profitably planted?—Very much.

970. How much do you think?—I have no idea. I do not remember the acreage.

971. Is there much difficulty in getting your timber to the market?—No. The Highland Railway is opened and has been of great benefit to the district.

972. Are the rates high?—The wood merchants complain about them. We sell to the wood merchants; we are not so immediately connected with the rates as they are, but we hear the wood merchants complain very much about them.

973. Do you sell your timber direct to the wood merchants?—We sell it direct to the wood merchants. When it is not a clean cut we cut out such trees as require to be cut and measure them; they are sold by the foot at three different prices.

974. Is all your timber managed on commercial principles?—Except what is used for estate purposes.

975. Is all the timber that is used for improvements in the estate home-grown timber?—Generally.

976. Is there any foreign timber used in houses?—Yes. If there is a great hurry to get a shooting lodge put in order, or a farmhouse, they sometimes take dry foreign timber, but where there is time it is generally home timber that is used.

977. Do you think some home timber might be used in buildings for building purposes?—Yes, there is no doubt of it.

978. You do not think enough trouble is taken to find markets for home-grown timber?—The only trouble taken is to advertise it to the wood merchants; we leave them to find the markets.

Mr. *Munro Ferguson*—continued.

979. What reasons do the wood merchants give for not taking home timber?—None. They would take it if they had a market for it; one reason is the depression of trade. The principal market we used to have for home timber was the coal and iron pits.

980. Is the growth of timber much hampered by game in Perthshire?—A good deal.

981. By what kind of game chiefly?—I would begin at Capercalzie, they destroy the tops of the Scotch firs; and hares and rabbits are the principal animals. I find that grouse are very apt to destroy young buds.

982. You think the growth of timber is seriously hampered by game in Perthshire?—If it is planted in large areas not very much, but small belts are very much damaged by game.

983. Do you raise any natural wood?—Nothing but birch. There is a natural wood in Perthshire, the old wood of Rannoch. It is a wood of considerable extent entirely of Scotch fir.

984. Do you think more natural timber could be raised?—I do not understand how you mean.

985. Could more timber be grown on the system of its being allowed to grow naturally than by plantations?—You require to introduce the seed some how; then you require to break up the surface.

986. You do not grow any timber by the natural system?—No.

Mr. *Egerton Hubbard.*

987. Could you give the Committee a table of the original cost of the Duke of Athole's plantations and what they paid during the last 50 or 60 years?—I could not tell you what they paid, but I can give you an idea what the cost was.

988. Will you put in those cards. (*The Witness handed in two cards,* vide *Appendix.*) Have you no record of the annual value of the timber sales of the Duke?—Since I have had the management; I have the sales books since 1860.

989. Could you tell us how much per acre, roughly, over a certain area it has been the last 20 years?—No, I could not. Because the wind-blown trees in 1879 have interfered with all our calculations in that respect.

990. Up to 1879 you might?—We might manage the general average income, but I could hardly give the income from the different plantations.

991. You could not show us the increased value per acre?—A great many sheep runs are let from 6 *d.* per acre up to 2 *s.* or 3 *s.*, and at the end of 50 or 60 years when we have a crop we might have larch worth 40 *l.* or 50 *l.* an acre, so that it would be far more profitable to be planted than to be kept for sheep. Some people say it would interfere with the grouse shooting, but I do not think so.

992. Is there any one kind of foreign timber more than another which rivals the home-grown timber. Does foreign pitch pine or spruce run you close?—We have a better quality of home spruce than the spruce we get from the Baltic; it is harder; and the old wood of Glen Fishie, Rannoch and Braemar is equal to any Baltic timber.

Mr. *Munro Ferguson.*

993. That is natural timber?—Yes.

Mr. *Egerton Hubbard.*

994. How old must a spruce fir be to be worth cutting down?—It depends on the purpose it is to be used for.

995. To be worth selling in the open market?—We sell it in the open market when it is fit for pit props.

996. How young could you sell a spruce fir for pit props?—Fifteen years old, but at that age they would only be fit for pit props for mining purposes.

Mr. *Rankin.*

997. In that calculation which you have made with regard to the cost of planting have you taken into consideration the accumulation of interest upon the rental year by year?—What calculation?

998. I understood you handed in a calculation of the cost of planting?—It was not I that made it up. I have only a calculation that was made up before.

999. Then you do not know whether that embraces the rent of the land and the interest upon the rent of the land?—No.

1000. You said just now you would not plant larch as a tree for profit?—I would not advise any proprietor to invest much money in larch planting on account of the disease.

1001. Have you reason to believe that that disease will be permanent?—No, I do not think it, because I have seen some years that were not as bad as others.

1002. Is it in Scotland a disease of such amount as to seriously damage the trees?—It destroys them altogether, and in England also I saw an instance the other day where they were just as bad, in Hampshire.

1003. What tree would you plant?—Scotch firs are the surest to plant in Scotland on our hills. Scotch firs and birch.

1004. How long is it before Scotch fir comes to maturity?—Scotch fir will continue to grow until it is 120 years old, but it is fit for the market before that time.

1005. How soon would you make a final cutting of a Scotch fir plantation at the greatest profit?—Not sooner than 80 years old certainly.

1006. About two generations?—Yes.

1007. Do you think then that planting Scotch fir upon ground that can be rented at almost any money is a paying operation commercially?—Do you mean at a large rent?

1008. No, I mean at a small rental?—I would not advise planting moor land if it were worth from 7 *s.* 6 *d.* to 10 *s.* for pasture purposes. There is plenty not worth 1 *s.* which ought to be planted first; the least valuable ought to be the first planted, and not beyond a certain altitude. Scotch fir might be planted up to an altitude of 1,500 feet advantageously, but not higher. I think it would be prudent to limit the planting of larch to between 1,000 feet and 1,200 feet.

1009. Your opinion is that there is a considerable quantity of land in Scotland which might be commercially profitably planted with some kind of tree?—Certainly.

Mr. *Rankin*—continued.

1010. Have you tried the Douglasii pine at all in Scotland?—Yes.

1011. Do you think that a good tree?—In certain situations it is. It is a fast-growing tree, but it ought only to be planted on land suitable to the other varieties of abies or spruce firs.

1012. Is there any deciduous tree which you would recommend to be planted?—Yes, ash, sycamore, and oak. Oak used to be planted extensively for the purpose of forming coppices, but now oak coppices do not pay. The only place where it would be of advantage is in steep ravines.

1013. A question was put to you by an honourable Member a few minutes ago with regard to planting timber which might become useful in years to come; do you think that any amount of learning or foresight could possibly lead a man to know what would be the proper timber to plant to come into the market in 50 or 60 years?—I have not the slightest doubt of it.

1014. You think it is possible?—Quite possible, unless it were to be attacked by an insect such as the larch is; of course no human foresight could prevail against that.

1015. What do you think would be the timber to be profitable 50 or 60 years hence?—I think at present Scotch firs on moorland are most likely to be profitable.

1016. With regard to the diseases of the larch and the trees generally, you said just now that you thought foresters ought to have a knowledge of the diseases of trees, and a knowledge of entomology, as insects create a great many of these diseases. Would it not be possible for foresters to send portions of a diseased tree for examination to scientific men?—Quite possible.

1017. Would it not be a sufficient way of finding out the nature of the disease?—It might be. I have sent specimens, and I have found scientific men to differ very much about the causes.

1018. Do not you think if scientific men differ so much about them, that partially scientific or wholly unscientific men would differ a great deal more?—No doubt.

1019. And you think it possible for working foresters with anything like a moderate education to acquire such a knowledge of the diseases of trees as to make it really worth while their going into that?—I think they would; I do not see anything to prevent it.

1020. You just now mentioned the education of gardeners, and you said that no gentleman would take a gardener who was not a properly qualified man; but there is no school for gardeners as far as I am aware either in Scotland or in England?—No, but then they go to good gardens to learn.

1021. They are apprenticed, in fact?—Yes.

1022. Do not you think a more practicable way of getting hold of working foresters is to have them apprenticed to good foresters who are at present working foresters, rather than to send them to some centralised school?—At present there are very few large establishments like gardens where a number of apprentices would be taken in.

1023. Are there not sufficient of those to be able to train up a sufficient supply of new foresters?—

Mr. *Rankin*—continued.

ters?—I do not think so. I know Mr. MacCorquodale takes pupils, or he did, and I have had one or two myself, but they came as labourers. I took no fee and I had not them put under apprenticeship. They simply saw the operations as they went on. There was no agreement whatever. They just came and went when they saw proper.

1024. Do you think it would be possible to get any knowledge of forestry, sufficient to give some kind of inkling, as you say in Scotland, to young men, by having some tuition at the elementary schools on that subject?—That is well worthy of consideration.

1025. Do you think the Government would be justified in giving a grant, making it what they call a special subject?—Yes.

1026. Giving a grant to such a subject as forestry?—Yes, they do so now for agriculture, I think.

1027. Not in elementary schools?—It is a special subject under the Science and Art Department.

Colonel *Nolan.*

1028. Do you think moor land at sixpence an acre might be very profitably planted with trees?—No doubt.

1029. What would be the cost per acre of planting the cheapest place on a large scale?—About 2 *l.* an acre.

1030. Does that include fencing?—Yes.

1031. Fencing and all?—Yes, if the plantation were of a large area, because large areas can be inclosed cheaper than small ones.

1032. Do you know Ireland at all?—No, I do not.

1033. If you have a large mountainous district of say half a million acres, and there is very little planting in it, do you think it would improve the country generally to plant a portion of that with trees?—Certainly.

1034. Do you think it would be worth the while of the Government to undertake it; not the whole of it, but some thousands of acres?—Do you mean the Government or the proprietors?

1035. The Government?—Well, I do not know. It would be worth somebody's while at all events.

1036. If the proprietors will not or cannot do it, do you think it might be of national advantage if the Government took it up?—Yes.

1037. Are not there some districts in Scotland where the enterprising proprietors plant a good deal, and other districts with equal advantages where other proprietors do not plant at all?—That is the case.

1038. In those districts where the proprietors do not plant do you think some advantage would be gained if the Government were to take up their work and plant, of course keeping the increase of the trees to themselves. Do you think that might be done with advantage?—I daresay it might.

1039. You have not thought on that subject?—It introduces rather a complicated question; how would the proprietor be compensated?

1040. Suppose they were paid for the land they give up, and were willing to give it up?—It would be far better to have the land planted than left as it is at all events.

1041. And it would shelter the other land?—Yes.

1042. And would generally improve and beautify the country?—Yes.

1043. Would it not introduce new industries into the country?—Very possibly.

1044. In those districts where the proprietors do not plant, do you think it would be advantageous for the Government to step in and plant trees?—Certainly.

Dr. *Farquharson.*

1045. I think you told us you began your life as a woodman?—Yes.

1046. You picked up all the knowledge you got for yourself?—Certainly; I was at no school.

1047. You have had no instruction?—No.

1048. Do you think you would have done better if you had had a course of scientific instruction?—I have not the slightest doubt of it; I have felt the want of it all along. I had to read up, and there are very few books to read.

1049. That is your own experience, and you are prepared to recommend that men beginning life as foresters should have some definite instruction?—Certainly.

1050. Have you formed any opinion as to what the length of such a course ought to be; what is the shortest time. Of course these men are poor and cannot afford to pay very large fees or go on long?—The very shortest time to see all the operations would be a year. He ought to be two years at the very least.

1051. Would that include the lectures and instructions at the school?—If the school and the forest were to be within a reasonable distance of each other, it might.

1052. Do you think it is advisable and necessary to teach young fellows of the rank of foresters on small properties, botany and elaborate things of that kind. Do you think they would be much better for it?—They require to know as much of botany as would enable them to distinguish one plant from another.

1053. That is a very simple matter. You would not be prepared to recommend a long course of botany?—No, I do not mean that.

1054. I believe you said the management of the Scotch forests might be much better than it is now?—Yes.

1055. In what respect? Where does the deficiency now lie in the management of the Scotch forests?—The deficiency lies in this, that if it is left to the forester he does not know when to begin to thin, or when to plant and what to do. Some men in charge of woods prune live branches off coniferous or resinous trees.

1056. That bad management is in consequence of the ignorance of those who manage it, I suppose?—To a certain extent.

1057. You said something about factors. Is it not the fact that most of the factorships on small properties are held by lawyers of the neighbouring towns?—In very small properties, but now I think

Dr. *Farquharson*—continued.

resident factors are more becoming the rule in Perthshire.

1058. You cannot expect town lawyers to know much about planting?—No, I do not think they pretend to.

1059. You think the better plan would be to have resident men who would superintend these matters?—Yes.

1060. Do you think the low price of trees just now is more due to the gale of 1879 or to foreign competition?—I think it is more due to the depression of trade. If the coal and iron trade were as prosperous as we have seen it our thinnings and our home wood would sell much better.

Mr. *Munro Ferguson.*

1061. There is more coal being taken out now than ever was taken out before, is there not?—The price is not so high.

Sir *Richard Temple.*

1062. As regards the consumption of wood, it is a question of the quantity of coal and not of the price?—I think the coal masters like larch pit props, but use foreign props because they get them cheaper. Foreign props consist principally of spruce fir.

Dr. *Farquharson.*

1063. The market, you say, was thoroughly glutted in 1879?—Yes.

1064. Is it beginning to recover from that?—Not very much yet.

Sir *Richard Temple.*

1065. Was not the market all through glutted by the great gale of 1881?—There was a succession of gales from 1879 to 1883 or 1884.

1066. There was a very bad one in 1881, was there not?—Our worst gale was in 1879.

1067. There was a gale in 1881?—In 1881, 1882, and 1883. I am not certain, but I believe that altogether in four or five gales there were 200,000 trees blown down on the Duke's estate. 1879 was the worst gale we had.

Dr. *Farquharson.*

1068. I suppose the low price of wood is largely due to the fact that you can buy a better class from abroad and cheaper than you can get it in this country; is not that really the fact?—I do not know. There is nothing to come into competition with larch if larch would only grow as it did 80 years ago.

1069. Is it not the case that larch will not grow in many parts of Scotland now?—It is not growing in any place hardly.

1070. It is attacked by a disease when it has got about half-way up?—Yes.

1071. You said something about the desirability of studying the diseases of trees; I suppose very little is known about the diseases of trees; is there anything known about insects, for instance, the insect that attacks the larch; does anyone know anything of that?—Yes, I think they do.

Viscount *Ebrington.*

1072. Could you say whether the great plantations on the Duke of Athole's property and elsewhere have had any effect on the climate?—I think they have; they shelter the low ground very much.

Viscount *Ebrington*—continued.

1073. Have they affected the rainfall at all?—I would not say that. I do not think there is any record kept of the rainfall before.

1074. A former witness before the Committee said he thought the effect of planting forests was to make the climate more equable and temperate?—That is the general opinion, I believe, but I could not say so from experience.

1075. You cannot say that it affects the rainfall either?—I could not say.

1076. You have a great deal of rain there, I suppose?—No, it is not a very wet district in Perthshire. We have an average rainfall of 30 to 40 inches.

1077. Have these plantations been successful as a commercial speculation?—I think so.

1078. But at present prices they are not?—Even at present prices they are better than if left as moorland in their original state. Before 1879 we were getting 14 *d.* and 15 *d.* a foot for larch, and now it is down to 9 *d.* and 10 *d.* Scotch fir freely brought 8 *d.* a cubic foot; now it is only 4 *d.*, and there is very little demand at that.

1079. I suppose anything over 1 *s.* a foot for larch pays well?—Less than 1 *s.* pays well.

Mr. *Evelyn.*

1080. From whatever cause I understand the cultivation of woodlands is much less profitable than it used to be when you began your career in connection with forests; it does not pay so well?—Oak coppice does not pay nearly so well. The reason is that other foreign substances are used for tanning leather.

1081. Does larch pay as well?—No.

1082. With regard to the 366 acres of larch, you said, I think, that they were planted on land from 300 to 1,000 feet above the level of the sea?—Yes, I am speaking from recollection of the figures on the Ordnance Survey.

1083. What is the highest elevation at which larch can be profitably grown?—I said from 1,000 to 1,200 feet, provided the soil and situation were suitable.

1084. You said also, I think, that there is a good deal of waste land in Perthshire that might be planted?—Yes.

1085. Is much of that waste land at a high elevation?—There is a good deal of it higher than that; but it would not be advisable to plant higher than that.

1086. But much of it below that is fit for planting?—A great extent.

1087. With regard to this disease in the larch that has caused so much ravage; has it increased of late years?—Yes, I think it has.

1088. Can you tell us when the disease first appeared?—A cotton-like substance was noticed first about 1860, and since then it has increased very much.

1089. Has any way of combating the disease or any remedy yet been discovered or made known?—I do not think it has been tried.

1090. Have you found the Scotch fir also subject to the ravages of an aphis or any other disease?—

Mr. *Evelyn*—continued.

disease?—I have found a white substance caused by a coccus on the Scotch fir, but it does not kill it.

1091. I have found Scotch fir in the county of Surrey subject to some disease?—There are beetles that affect it too, and there is also the caterpillar of the sawfly that devours the foliage of the Scotch fir.

1092. But not to the same extent as the larch?—No, the larch tree dies entirely.

Mr. *Craig Sellar.*

1093. I regret I did not hear the beginning of your evidence; have you given any evidence as to the cost of planting?—Only what I gave just now; 2 *l.* an acre has been the cost of planting Scotch fir.

1094. Does that include the fencing?—Yes, if the extent is large.

1095. Would it be wire fencing?—Principally; we use wire fencing principally now.

1096. Is it deer wire fencing—No; only about 3 feet 6 high.

1097. About 2 *l.* an acre?—Yes.

1098. To what extent?—You would require to have about 500 acres in a plantation.

1089. You could plant 500 acres at 2 *l.* an acre?—Yes.

1100. Including the trenching?—No trenching.

1101. Simply the fencing?—Three-year old plants; the fencing and any draining that might be requisite.

1102. That is for a fence 3½ feet high?—Three feet six to three feet eight.

Mr. *Egerton Hubbard.*

1103. Is it your experience that planting larch upon a sandy soil in Scotland makes pasture grow underneath the larch; have you ever seen young larches turn a sandy soil into pasture?—No, never. The larch destroys the heather, and grass comes up instead of the heather almost always.

1104. It does turn the heather into grass?—It does not turn the heather into grass; but it makes grass come in place of the heather.

Mr. *Munro Ferguson.*

1105. What would be the average rental of the land which is under 20,000 acres of timber?—Two shillings an acre overhead.

1106. Have you any idea of what the value of the woods would be as they stand?—No.

1107. You are substituting the planting of Scotch fir for the planting of larch now?—Yes; and of course we are planting Scotch fir where I would not plant larch under any circumstances.

1108. You are not planting so much larch now as formerly?—No.

1109. There is a great advantage in planting timber in large blocks?—Yes; it can be done for various reasons; it can be done cheaper; and it affords great shelter.

1110. I suppose it is your opinion that there is a great deal of land which has little chance of being turned to the best advantage, because some small annual shooting rentals or grazing rental is valued by the proprietor more than the distant prospect of a large return from timber?—That is so.

Mr. *Craig Sellar.*

1111. Are any of your plantations deer fenced?—Yes.

1112. What increase of cost do you suppose it would be?—About 4 *d.* a yard more for the fencing.

1113. What would that amount to per acre?—I could not tell that exactly.

1114. Could you do it for 4 *l.* an acre?—Oh, yes; a large extent.

1115. Five hundred acres?—Yes.

Chairman.

1116. I asked you as to your views about Dr. Schleck's evidence; you know who Dr. Schleck is, I believe; you know he is connected with Cooper's Hill College?—Yes.

1117. His evidence rather seems to recommend the connection of a forest school with Cooper's Hill, where already, as you are perhaps aware, students receive a certain amount of forestry instruction, with a view of managing Indian forests; do you think a central school of that sort would be a good thing, and if it were established, do you think it would be better connected with Cooper's Hill, or with some more strictly agricultural college?—Certainly it would be better to be associated with an agricultural college than with an institution like Cooper's Hill.

1118. Do you think that until any central school, or any school, can be established for the purpose of instruction in forestry, it would be a good thing to carry out generally the same system which has been carried out, according to your evidence, by the Highland Agricultural Society?—Yes.

1119. The system of having boards of examiners in different parts of the country to examine candidates, not only candidates who are going to become professional foresters, but all candidates who desire to be examined in forestry; do you think that system would be a good one?—I think it would, because no candidate would come up for examination without preparing himself to a certain extent.

1120. And you believe that if some such system as that were adopted, it would call attention to the defects which you and other witnesses have given us evidence upon, as to the mismanagement, and the want of scientific knowledge of forestry generally?—Yes, I think it would do so.

Sir *Richard Temple.*

1121. Besides the points which you have mentioned in your evidence, is there any other point upon which you would like to make any statement to the Committee?—There is one thing, that if the woods were more extensive in Scotland, there would be more employment for workpeople; the country would maintain a larger population.

1122. Then you think the forest area in Scotland might be largely increased?—Very largely; it can be very much extended.

1123. With profit?—With profit.

1124. Why is that not done now?—I cannot tell. It is expensive to some proprietors to do so;

Sir *Richard Temple*—continued.

and perhaps they would not be very able; that may be one reason.

1125. Would you attribute that to popular ignorance of the value of woods and forestry?—No.

Mr. *Munro Ferguson.*

1126. I suppose the largeness of the capital required is a consideration?—Yes, very much so; and it does not make immediate returns; that is another consideration.

Mr. *Egerton Hubbard.*

1127. Have you ever known a proprietor borrow money from Government, or a society, pay interest upon it, and make it pay?—I think it may be done; I believe it can be done just now. The Lands Improvement Company lend money to proprietors to form plantations; or, at all events, a certain proportion of the expense is found by the Lands Improvement Company.

Sir *Richard Temple.*

1128. Would the return upon capital laid out in forestry be long deferred?—I do not think it would.

1129. How many years?—Twenty-five years, perhaps.

1130. Is that the shortest time?—I could not tell.

1131. Would there be no return at all before 25 years?—Oh, yes; the thinnings would be of some value after 15 years.

1132. Would there be no return for 15 years?—No.

1133. Is not that rather a long time to wait?—I do not know.

Mr. *Craig Sellar.*

1134. You are speaking of larch plantations, I suppose?—Scotch firs.

1135. Scotch firs and larch?—I have just stated that the larch at present is in such an unsatisfactory state that I would not advise a proprietor to invest largely in planting larch. It is so diseased.

Mr. *Craig Sellar*—continued.

1136. Are not proprietors prevented by the danger of losing many of their trees by gales of wind in Scotland from planting; you mentioned a very great number that were destroyed in 1879?—We have had a series of gales since 1879. There was a very hurtful gale in 1860, which blew down a number of trees.

1137. Is not it the fact that proprietors may lose a number of trees in that way, and does not that deter them from investing money in planting?—I do not think so.

1138. It seems a reasonable thing that it should do so?—They were not entirely lost, although they were blown down. Of course it glutted the market, and it was an extraordinary occurence.

1139. The price was very much lowered by the multitude of trees in the market through those gales?—Yes.

1140. You think it is the slow return that prevents the planting?—That is one reason.

1141. What other reasons are there?—When sheep farms are let, and when shootings are let, sometimes the sheep farmer and sometimes the shooting tenant objects to the proprietor taking off a slice of land and planting it.

1142. That means that sheep farming and shooting rents are much more lucrative than planting?—They are more immediate.

Mr. *Munro Ferguson.*

1143. You think sporting rents have discouraged planting in Scotland; they have been an obstacle to making new plantations?—I do not think they have encouraged it at all events.

1144. Do you suffer much from squirrels?—Yes, a good deal.

Chairman.

1145. If there is any evidence which you would like to give on any special point, which will assist the Committee in the consideration of this subject, we shall be glad to hear it?—I think there is nothing else.

Mr. JOHN GRANT THOMSON, called in; and Examined.

Chairman.

1146. YOU are, I think, head forester and woodman of the Dowager Countess of Seafield at Strathspey?—Yes.

1147. You reside at Grantown, in North Britain?—Yes.

1148. Have you been employed in connection with woods and forests from your youth?—All my lifetime.

1149. Before entering into the service of the late Lord Seafield you were employed in Crown woods near Newcastle-on-Tyne, were you not?—Yes.

1150. You have also been employed in the Forest of Dean?—Yes.

1151. In what counties are the woods belonging to Lady Seafield?—They are scattered over the counties of Inverness, Banff, and Moray.

1152. What is the extent of the Strathspey

Chairman—continued.

district in which you have special charge?—Somewhere between 60,000 and 70,000 acres; that is the woodlands alone.

1153. I believe a considerable sum of money has been expended on the estate since you took charge of it? A large amount of money; somewhere about 90,000 *l.* or 100,000 *l.*

1154. What do you consider the cost of planting in Scotland, including the carting, the plants, the draining, the wire, and the whole thing?—It depends very much on the size of the inclosure. If it is a large inclosure it can be done much more cheaply than a small one. In one plantation out of a number that we made I have the details here. It was nearly 900 acres in extent. It was fenced with six wires, wooden straining, and wooden intermediate posts. The straining posts were put in wherever they were required,

at

Chairman—continued.

at distances 60 to 100 yards, and sometimes 120 yards apart, but the intermediate posts were six feet apart. The cost of that was 259 *l.* 10 *s.* 2 *d.* Then we planted 2,826,000 Scotch firs of different ages. They were sometimes one year, two years, and sometimes two years, one year, transplanted; they are the same age (three years old), but differently treated. Then there were 111,000 larch and 50,000 varieties, principally spruce. We have our own nursery, but these were charged the same as if they had been bought, some 6 *s.* or 7 *s.* a thousand for the Scotch fir. That came to 651 *l.* 6 *s.* The expense of carting the plants from the nursery and planting them was 328 *l.* 19 *s.* 11 *d.*, and for drains, 64 *l.* 8 *s.* 4 *d.*, making a total of 1,304 *l.* 4 *s.* 5 *d.*, or somewhere about 30 *s.* an acre.

1155. Have you read the evidence given before this Committee of the last year and the year before?—Partly.

1156. What are your views with regard to the question of a school of forestry?—It would be all the better if there could be a school of forestry. If they had the theoretical as well as the practical part it would be all the better for foresters.

1157. You have had some experience of training young men on the estate as foreigners?—I have trained a large number.

1158. Do they come to you as apprentices or merely as labourers on the estate?—They are labourers and apprentices at the same time. They stay with us two or three years, and then we generally get some other employment for them as foremen or as foresters.

1159. Do you think if that system were generally adopted, it would, to a great extent, supply the information which is required?—Yes; at the same time it would be all the better if there were a higher school where they could get more instruction than could be given on private properties.

1160. They would get the practice on the private properties, and they would get more of the theory at the schools?—Yes.

1161. I think you have a theory of your own as regards the question of reproduction of trees. In your paper you mention that you notice that where trees are frequently planted in the same soil there is a tendency to decay?—Yes. There is the decayed vegetable matter of former crops of trees, which forms a skin on the ground. The seed does not get down to the sub-soil, and until it does get to the sub-soil it will not make any perceptible growth. It may keep alive for a time, but it very seldom takes root at all. As soon as it gets to the sub-soil it grows quite freely.

1162. Do you think the want of production of some of our woodlands is in any way attributable to that?—Not unless the ground has been under a crop of wood for a great length of time. In the natural forests they have been under a crop of wood for many generations.

1163. In that case it would be better to grub up the old wood and plant fresh woodland in another place?—It would be much better.

Mr. *C. Acland.*

1164. I observe in your paper that re-planting on the same ground does not appear to answer. Do you apply that to planting the same kind of trees?—Yes.

1165. Would it be different if you were planting chestnuts or oaks after fir?—Quite different. I have seen natural woods that have been under Scotch fir, when they were cut away, the birch grew the next year, or a year or two afterwards, where Scotch fir would not have grown.

1166. Do you think that with regard to a fact of that kind there is much to be learned by systematic experiment?—There is, no doubt.

1167. There is nothing of that kind now established, is there?—Nothing that I am aware of.

1168. What is learnt has been learnt haphazard from the experience of different men?—Yes; and when one is going through the country taking notes of any matter of that kind.

1169. Do you think that more would be done for forestry by the establishment of a school for teaching young foresters either theory or practice, or by establishing a system of examination by competent men, and giving the men who are employed to examine some kind of position, such as professors; an endowment, I mean, so that they might go about the country and study the question in a scientific way, and then by means of their examination direct the education of young foresters?—I think the best way would be to have the school; and have them examined there, in the schools.

1170. Do you think there is a sufficient number of foresters employed to maintain a school?—There is a sufficient number employed if they would be able to pay the fees. As a rule, foresters are not over well paid, and if they had to pay heavy fees for a school, I am afraid they would not be able to do it.

1171. At the same time a school must be a paying concern if it is to go on. It is a question of demand whether the supply can be maintained, is it not?—I should be afraid that the number of pupils would not support a school.

1172. That is my fear; that is why I suggested the alternative; if we cannot maintain a school, whether we can do anything in another way to promote intelligent forestry?—Something might be done as you suggest by going through the country, and having centres where foresters might be examined.

1173. You have heard, I daresay, of the University local examinations?—Yes.

1174. You have heard of the examinations spoken of by the last witness, conducted, I think, at Edinburgh only?—That is by the Highland Agricultural Society; yes.

1175. That system might be extended with profit?—It might. I think it would be with profit if it were extended.

1176. Do you think the question of examination is sufficiently appreciated by Scotch foresters and Scotch landlords?—There are only three on an average, I think, come forward each year for examination.

1177. Are you one of the examiners?—I am.

Mr. *C. Acland*—continued.

1178. How are the examiners appointed?—By the society.

1179. Are they all members of the society, or are they taken from outside?—I think they are all members of the society.

1180. Do you think anything can be done in connection with Botanical Gardens at Edinburgh?—Certainly you could get information there; but, if I may be allowed to say so, I think if there is a school of forestry they would require a tract of land, so that it could be managed by the school itself. I do not suppose that private proprietors would be inclined to give their ground for experimental purposes.

1181. Experimenting on forestry would take a long series of years?—Yes.

1182. And all that time the rent of the land would have to be paid?—Of course.

1183. Therefore, you see that the undertaking is a costly one?—It would be a costly one. My idea is that they would require 3,000 to 10,000 acres.

1184. What do you suppose the rental of such a tract would be: 2*s.* 6*d.* or 5*s.* an acre?—You require to pay a great deal more than that. You require to have it where there is good soil, low ground as well as high ground.

1185. You would not be able to earn the rate out of the forest, would you?—I think it should pay itself.

1186. You think that it is not an impracticable idea that a school might be established with a sufficient area of forestry to form an important centre of education for foresters?—I think it might be established.

Mr. *Munro Ferguson.*

1187. I suppose the school need not necessarily be a very expensive affair?—No, it would not require to be very expensive.

1188. What is your view about the school?—In what respect?

1189. How much do you think a school need cost; what would the staff require to be?—You would require a lecturer or a professor at, say 400*l.* or 500*l.* a year, and you would require a practical teacher of forestry, say at 200*l.* a year, and that would be about all that you would require.

1190. I suppose men who are going to the Colonies or to India would come and be educated?—I expect a great number would.

1191. Have you much natural fir?—A great deal of natural fir.

1192. Do you allow much of it to come up; do you inclose for the purpose of allowing natural fir to grow?—Great quantities; to a great extent.

1193. What proportion of your timber is natural fir and what is planted. Is half of it natural fir?—I should think about half is natural fir and birch.

1194. Do you get a higher price for it in the market?—No, although it is better quality.

1195. You ought to?—We ought to, but we do not.

1196. Do you cut on a regular system, or according to the markets, or according to any other reason. Do you cut so many acres a year?—Not so many acres a year, but so much thinning and then clearing at the same time.

Mr. *Munro Ferguson*—continued.

1197. Do you have a clean cut every year?—Not every year.

1198. How many men do you employ?—It varies very much; we do a great deal of our work by contract, nearly all the cutting of trees is by contract, so much per hundred; fencing is by contract, so much a yard or 100 yards.

1199. Since so much land has been put under timber in your district there has been a larger field for labour; it gives more employment?—It gives more employment for work-people.

1200. Have you much difficulty in getting your timber to the markets?—None now. We have the benefit of the Highland Railway and the Great North of Scotland Railway; both run through the property.

1201. What do you consider has been the fall of prices within the last 10 or 15 years; how much has timber gone down during the last 10 or 15 years?—Fully a third.

1202. Have you been much troubled by squirrels?—Very much.

1203. And by game?—Very little by game otherwise.

Mr. *Egerton Hubbard.*

1204. How many wood-cutters do you employ?—In Strathspey there are three foresters, and under each forester there is a regular staff of men.

1205. We have it in evidence that a school of forestry would be most useful to the head men; men like yourself or your sub-foresters, and that technical education is not necessary for the men who are only employed to cut down trees, or do the regular planting; If those men had the education they might rise from being wood-cutters to being head men, and very likely would rise.

1206. A forest could be well managed by a skilled head forester and by men under his command who were not skilled?—Perfectly.

1207. You told us in evidence that probably young men could not afford the cost of the education?—Where there is a will there is nearly always a way.

1208. In speaking of forestry, must we not distinguish between forestry that is necessary for England, Scotland, Wales, and Ireland; I mean, would a forester taught in Devonshire be a good forester for Strathspey?—I think not; the two are distinct and separate.

1209. It was argued that there were certain general principles that were equally applicable to all parts of the United Kindom, but that the practice must be learned in the individual place?—Almost in the locality.

1210. Have you any experience of training young men as foresters to go out to India?—Several of them have been with me for some time before going out, after coming home from France.

1211. They went abroad first?—They went abroad to France first and came to me afterwards.

1212. Have

Mr. *Rankin.*

1212. Have you ever made a calculation of the cost of planting from the beginning to the end, of any special plantation?—The one that I have just quoted is from the time the ground was inclosed, which included inclosing, planting, plants, and draining. It cost somewhere about 30 *s.* per acre.

1213. Have you followed that up by also keeping an account of the cost of cutting and the thinning and any other processes, and on the other side, the money that you received for the sales of the particular plantation?—None of the plantations that I have made have, I may say, yielded any return yet.

1214. Then you are unable to give the Committee any information as to any profit which may arise or has arisen on any of your woods?—From calculations that I made on other plantations I think they should yield about 10 *s.* a year; from 7 *s.* 6 *d.* to 10 *s.* a year per acre.

1215. You think it would be worth planting any land which did not bring in a rental of 10 *s.* a year?—Yes, if you have a sufficient extent of it, but if it is only a little bit, the cost of inclosing a little bit is very much extra. It comes to be very expensive if you fence a small bit.

1216 Do you think there would be a sufficient number of foresters who would take advantage of any school that were established so as to make it worth while setting up a school?—I think a good number would take advantage of it.

1217. Do you know what the present acreage of forests in Scotland is?—I think there is somewhere about 730,000 acres of woodland in Scotland.

1218. I forget whether the Scotch fir forests are returned annually with the agricultural returns or not?—I think they are.

1219. Do you think the system of apprenticing boys and young men is a good one for teaching them practical forestry?—I think so.

1220. Is that a system which is tolerably largely adopted in Scotland?—I always have several young men with myself; I cannot speak as to others.

1221. I presume they go out to be head foresters to smaller places?—To smaller places, and sometimes to pretty large places.

1222. Do you think that growing trees in Scotland is an industry which is likely to be sufficiently useful from a national point of view to make it the duty of the State to subsidise it?—I should think so.

1223. Why?—Because I think timber is sure to rise in value. Foreign competition will very likely fall off as it gets more inland and more expensive to bring it home, and the home timber will rise in value.

1224. That has not been the process the last 25 years?—No, it has not.

Viscount *Ebrington.*

1225. You said just now you thought land that was worth less than 10 *s.* an acre was worth planting if you had a large tract of it?—Yes.

1226. What sort of sized tract?—I should say from 300 acres upwards.

Viscount *Ebrington*—continued.

1227. We had it in evidence the other day that growers of timber in this country were put at a disadvantage by the treatment they got from the railways, who carried foreign timber much cheaper than home grown timber; is that your experience?—I have not much experience of foreign timber coming into our locality. There is not a great deal of foreign timber comes into our locality.

1228. But foreign timber comes to the markets in which you sell, does it not?—Timber merchants always complain of the railway companies charging too much.

1229. Are you able to say from your own experience whether these great plantations at Strathspey and elsewhere have had any effect on the climate?—I think they have. I know of one plantation that was cut down. There was a spring of water in it before the trees were felled; shortly after the trees were felled the spring dried; now it is replanted again, and they are up four or five feet high, the waters have returned to the spring. The trees prevent evaporation.

1230. Speaking generally, has the effect of the plantations on the surrounding agricultural land been beneficial or otherwise?—They have been beneficial as far as shelter is concerned. A great number of farmers have applied to get a small portion of their farms inclosed for the sake of the shelter.

1231. Can you say whether it has affected the rainfall or not?—I could not say whether it has, further than the instance I have given you about the spring.

Mr. *Fuller Maitland.*

1232. You just now said you calculated the profit upon certain forests to be something like 7 *s.* 6 *d.* per acre; what do you suppose would be the value of that land to let for other purposes; would it be as much as that?—No; it would be worth about from 8 *d.* to 1 *s.* an acre.

1233. It is practically bog land or moor land? Not bog land, but moor land, dry moor land.

1234. What do you think it is worth for the shooting rent and the sheep rent?—Well, taking the two together, from 1 *s.* to 1 *s.* 3 *d.* an acre.

1235. Have you any knowledge of woodlands in England?—I have had partly experience of the Crown Woods both in Dean Forest and Chopwell, in the county of Durham.

1236. Do you think there are many districts in England where it would be desirable to plant forests on a large scale?—Well, I have not sufficient knowledge of the country to say.

1237. Do Scotch proprietors find much difficulty now in finding competent men to manage their forests for them?—Occasionally they do find difficulty, especially large owners or large proprietors.

1238. Is there a difficulty in finding the skilled labour which is necessary to properly attend to forests?—Not a great deal.

1239. You yourself would not find difficulty in finding skilled labour?—I have always more applicants than I can find employment for.

1240. Men who do their work well?—Yes; who are anxious to get into the employment for the sake of what they see and of the prospect of getting appointments afterwards.

Mr. *Fuller Maitland*—continued.

1241. Where do the Scotch proprietors now go to find foresters or men to manage their forests?—They frequently apply to myself, and frequently they apply to others such as Mr. M'Corquodale, and to nursery companies and nurserymen.

1242. Do you think that Scotch proprietors generally would be favourable to the establishment of a school of forestry in Scotland?—I think so.

1243. Do you think it is a matter that they would care very much about, or that they would merely accept it?—I think that they are taking more interest now than what they used to do in the plantations.

Dr. *Farquharson.*

1244. You told us that the late Lord Seafield invested a large sum of money in planting?—Yes.

1245. I think you said 80,000 *l.* or 90,000 *l.* Does he expect to get a tolerably good return from that from a commercial point of view, do you think?—Yes, commercially; but then there are other reasons to be taken into consideration. As I say, there are parts of it planted for ornamental and different purposes. Of course, as to what is planted for ornament and what is planted for any other purposes, you do not look to that for interest on your money. You look at it from a different point of view; the beauty of the place, or something of that kind. But these large plantations will pay interest on the money outlay, and rent for the land as well.

1246. Do you think there is an obligation on Scotch proprietors, or any proprietors, to plant a certain proportion of waste lands every year?—I think so.

1247. Even if it does not pay?—It will pay ultimately, I have no doubt.

1248. Do you think that Lord Seafield would have been as well off if he had not planted trees, but left his moors for grouse?—I think not.

1249. We have heard from several witnesses that there is a great deal of waste land in Scotland and elsewhere which might be planted with advantage; of course every waste land will not carry trees profitably; it is no use planting in soil if it is not adapted for growing or carrying trees?—No, it is no use planting in soil that will not grow trees, but there is very little soil but what will grow trees.

1250. Damp, boggy soil will not?—No, that will not grow trees; nor rocky soil, bare rock would not do.

1251. That would exclude a great deal of waste land in Scotland and elsewhere, that has been spoken of?—Yes, if you take it all in one tract.

1252. Do you think it reasonable to believe that some portion of the diseases of trees arises from their being planted in unsuitable soil?—Partly. I think it is quite wrong to plant the same kind of trees in different kinds of soil. Some soil is more suitable for one tree than for another.

1253. You say that it would pay to plant any piece of waste land which is bringing in not more than 10 *s.* an acre; but in the one case you are getting your 10 *s.* without expenditure, and in

Dr. *Farquharson*—continued.

the other case you have got to go to a great expenditure to get your return. You have got to put down an immense sum before you can get a return from trees, and grouse moors will bring you a return without any expenditure at all. Does not that affect the commercial aspect of the thing?—These forests do not destroy shooting altogether.

1254. But they destroy the grouse shooting, certainly?—After a number of years, but not for a number of years after they are planted.

1255. Not many years after, I should think. You get black game, but I do not think you get grouse long after they are planted?—You get grouse from three to five years after. It depends on the state of your heather.

1256. In your experience is the use of wood in this country shrinking at all, from iron being more used; is it used less for coal props and things of that sort?—Very little for certain purposes. For large beams and such things as that the demand is falling off, but for ordinary purposes I do not think it is.

1257. I think you express a more hopeful opinion about the future of planting than some other witnesses. With regard to foreign competition; do you think that will probably lessen in future?—I think foreign competition will probably lessen in future.

1258. Is it your view that trees are brought over more cheaply on account of freights being cheaper from a less trade?—Yes; and labour is cheaper abroad just now, but it is sure to rise as English capitalists go there.

1259. Is it your opinion that the woods in Scotland and elsewhere are as badly managed as some of the witnesses want to make out?—There are some of them not very well managed.

1260. You do not admit that as regards your own woods, I suppose?—I think our own woods are managed tolerably well.

1261. Do you think they are as well managed as they might be if they were more scientifically managed according to the theories of some people?—I am not aware of anything in which they could be managed better than what is, in fact, being done at the present time.

1262. I wanted to ask you that question on account of a further question. Do you think your woods are sufficiently well managed to make it desirable as a training ground for students and young foresters; whether they could be adapted to that purpose?—Well, as I have said, I have trained a great many young men who have gone out to be foresters, and they have turned out very good men.

1263. Then, in fact, you have practically got a small forestry school of your own?—Yes, on a small scale.

1264. You train all your own staff, do not you?—Well, two of our head men were not trained with me, but all the others have been trained with me.

1265. Do you consider those men you turn out to be quite competent to take charge of woods on a small scale?—Quite, and some of them to take charge of woods on a large scale.

1266. In addition to that, are you good enough to take young men for a short time?—Yes, we take a considerable number of that kind.

1267. You would be of opinion that a short course

Dr. *Farquharson*—continued.

course of practical instruction carried on in your woods would be enough to fit a young fellow to take charge of a considerable plantation afterwards?—He would see a great deal in a few weeks or in a few months, but he would require I should say to be 12 months before he would be competent to take charge.

1268. Do you think he would be competent to take charge of woods without a course of lectures in botany, natural history and geology for instance?—He would be all the better for that.

1269. I suppose it would be quite a short course?—Quite a short course.

1270. Half a dozen lectures would be enough to tell him all the botany he would require?—A dozen.

1271. Then how many for natural history, half-a-dozen?—Half-a-dozen.

1272. The natural history would be I suppose about flies and injurious beetles and insects, of which you practically know nothing?—Beetles are very injurious.

1273. Do you think enough is known about those beetles, manners and customs and origin, to enable you to get any scientific instruction from any source about them?—There is not a great deal known about beetles as a general rule. A great number are very ignorant of it.

1274. I suppose it is an advantage of scientific instruction that it would stimulate young men to make investigations upon these things, and work them up. It would give them the lines on which they could work in the future scientifically, and get further information on those points?—There is no doubt it would, but the drawback is, that unless they are able to get better salaries than they are getting they could not afford to go to a great expense with their education.

1275. That is exactly the point I have been trying to drive at all along in this Committee, the difficulty in getting good cheap and practical instruction for your young men, who will get from 1 *l.* to 30 *s.* a week?—Yes, or from 80 *l.* to 100 *l.* a year.

1276. It would be absurd to think of sending them to a large school for two years' training in matters of science?—The remuneration would not pay the expense.

1277. Would you consider it possible to establish at your woods or elsewhere a short practical course which would make these young men quite fit to manage woods on a moderately large scale?—The difficulty of that would be that one proprietor might be willing, but perhaps his successor might object to it, so that you would require to have a school that would be independent of any one individual.

1278. Do you mean to say that the woods would have to be independent?—The school would have to be independent.

1279. There are no woods in the possession of Government which are sufficiently well managed or extensive to allow that instruction?—Not unless Government would assist in getting a tract of land as I suggested before for experiment.

1280. You think it would not be practicable to work the thing in Scotland in any of the existing woods on account of the difficulty you have suggested?—I do not think it would be.

Dr. *Farquharson*—continued.

1281. Now about the examination by the Agricultural Society; can any one go up for that examination?—Yes.

1282. Could I go up to-morrow for instance?—You could go up to-morrow.

1283. You do not require to produce any certificate of having attended lectures. Is there a curriculum?—I do not think so.

1284. You do not require to show that you have attended so many lectures in natural history and botany?—It is quite open.

1285. Is not it open to the drawback that you can go to the grinder and get posted with information which will last for a few weeks but will not last for years?—Scarcely.

1286. Do you think you could ask practical questions so as to see whether a young fellow understood the subject?—Yes.

1287. He is not obliged to show that he has attended practical instruction or anything of that sort?—No, he is not.

1288. Do not you find a natural reproduction of larch in your woods?—Yes, we have two or three very fine plantations of that description.

1289. Does that work well?—We get a regular crop.

1290. That is according to the German system or French system or some foreign system?—Yes.

1291. It saves, of course, the expense of planting?—It saves all the expense of planting.

Mr. *Evelyn.*

1292. Do I understand that you have had some experience of English woods as well as of Scotch woods?—I have been in the Government woods.

1293. Do you consider that the same rules of forestry, looking at the difference of climate and other differences between England and Scotland, would apply to England and Scotland, the same system of management of woods?—I do not think it; I do not think it would apply to the South of England.

1294. You mention the interesting fact that when you cut down Scotch firs that larch came up instead?—Yes.

1295. By a sort of natural succession?—Yes.

1296. Have not you found the same thing in England, that when you cut down an old wood some other kind of trees grow in its stead?—I have not had sufficient experience.

Mr. *Craig Sellar.*

1297. You gave us the expenditure of a large inclosure of 900 acres at 30 *s.* an acre?—Yes.

1298. Have you any details of smaller inclosures with you?—No, I have none with me.

1299. Are you troubled with rabbits on Lord Seafield's estates at all?—To a very small extent.

1300. You do not have to put wire netting around your inclosures?—No; we do around perhaps a single tree.

1301. But not around the whole inclosure?—No.

1302. Of course when you have to put wire netting that greatly adds to expense?—It would add about 3 *d.* per yard to the fencing.

Mr. *Craig Sellar*—continued.

1303. If besides that you had to put a deer fencing to keep deer out it would add to the expenses?—We have some of that kind.

1304. What is the expense of deer fencing?—Well it is just adding two or three wires on to the top of the ordinary fence and that is quite sufficient.

1305. You know all Scotland pretty well, do you?—Except the south-east.

1306. Has there been an increase in planting in Scotland, or a decrease, of late years?—Until within the last two or three years there was a large increase.

1307. You mean that in the last two or three years there has been a decrease?—There has been a decrease.

1308. To what do you attribute it chiefly?—To bad times, and the difficulty in getting farmers to allow their land being planted. Farmers are very unwilling to part with the land, the times are so hard upon them.

1309. I should have thought that farmers would be rather glad to get rid of a good deal of their land?—Unfortunately it is always the best bit of grazing that is taken for planting.

1310. Have you regular apprentices under you, men regularly apprenticed for so many years?—Well, not by any regular form of writing, but they come with the understanding that they will remain for two years or three years, and they look forward to getting something better out of it.

1311. Then if there was a School of Forestry, these men who had been with you for two or three years would go to the School of Forestry?—They would go to the School of Forestry.

1312. You say you do not think the number of people would maintain the school?—I am afraid of it.

1313. Could you utilize any of the Scotch Universities. There is a chair of agriculture, is not there?—Yes.

1314. There is no chair of forestry?—No, no chair of forestry.

1315. Would a chair of forestry be of any value, in the place of a school of forestry?—Well, not unless they had the practical teaching along with it.

1316. I mean if there was a chair of forestry in the Universities to which these lads who have been three years with you could go and attend the lectures instead of going to the forestry school, they could get the scientific teaching from the professor of forestry, could they not?—They could get the scientific training but they could not get the practical training.

1317. But I suppose they could get the practical training from you in the three years they are with you, and then they could go to the University and get their one year, or whatever it may be, of scientific training?—Yes.

1318. Has that been mooted at all?—I have never heard it mooted.

Mr. *Craig Sellar*—continued.

1319. What wages do these lads get when they have been with you three years?—They get 12 *s.* to 14 *s.* a week with me.

1320. On leaving?—All the time they are with me; then they look forward to getting on as foreman at 18 *s.* or 20 *s.* a week, or they may happen to get a forestry situation at 60 *l.* or 70 *l.* up to 100 *l.* a year.

1321. And a house?—And a house; it is occasionally higher.

1322. At what age do you consider these Scotch firs come to maturity; how many years old are they when they come to maturity?—I think at the very best, the most vigorous period of growth, they are 100 years of age, as a rule. You get exceptions where they ripen sooner, and in other cases they ripen later.

1323. They fall away after a hundred years? I believe that in suitable land they are just in full vigour at that time.

1324. I suppose you do cut them at 35 or 40 years, do not you?—Not as a rule; not a clean cut; we thin out before that.

Mr. *Munro Ferguson.*

1325. Is there much land in Inverness-shire that could be planted profitably?—Yes, a great extent.

1326. Are all your plantations Scotch firs?—Not altogether; it is a mixture. We put in larch wherever the soil is suitable; as a mixture we never plant it wholly as a crop.

1327. Do you think your birch pays?—Birch grows naturally. We do not require to plant birch.

1328. Do you find it a paying crop?—It pays very well as there is no expense in connection with it.

Mr. *D. Acland.*

1329. What do you do with the birch?—It is used for bobbins and for clog soles; we get from 10 *s.* to 12 *s.* a ton for it.

Mr. *Munro Ferguson.*

1330. Is it true that rabbits will not eat natural grown wood?—It is not my experience.

1331. It is a very common belief. It is not so?—It is not true.

Chairman.

1332. Is there anything you would like to put in as evidence, as the result of your experience, which you have with you, or which you would like to send us to have added to the minutes of your evidence?—I do not think so.

Mr. *Craig Sellar.*

1333. You did not tell us the number of planted acres over which you have supervision. Can you tell us roughly?—I think 30,000 or 35,000 acres.

28 *June* 1887.

Mr. WILLIAM M'CORQUODALE, called in; and Examined.

Chairman.

1334. You live at Jeanie Bank, Old Scone, Perth?—Yes.

1335. You are head forester to Lord Mansfield?—Yes.

1336. You have been employed by him in that capacity for a great number of years?—For the last 50 years.

1337. Your experience extends beyond that? You have had experience of more than that period, have not you, with woods?—About seven years previous to that.

1338. You were employed by the late Sir Michael Shaw Stewart; you have had some experience at Ardgowan, at Sir Michael Shaw Stewart's?—Yes.

1339. You were employed, I think, for some time in the Botanic Gardens at Edinburgh?—Yes, in the gardens.

1340. What woods?—The woods of the Duke of Montrose at Buchannan.

1341. I think you had had some experience more especially with regard to planting in nursery gardens?—I have been in nurseries; I have been a season at Leith Walk, and a season at Glasgow; and I went into the Botanic Gardens at Edinburgh.

1342. You have been employed extensively as a wood surveyor, I think, have you not?—Yes, I have.

1343. Have you in that capacity visited much woods in England as well as in Scotland?—Yes, I have.

1344. You have had a general experience of wood management in England?—I have inspected several estates in England.

1345. What is your general impression as regards the management of woodland in England. Is it very far behind that of Scotland?—The estates that I have been employed on were not so far behind. They were pretty well up.

1346. Do you find that those who have the management of woods are fairly competent to undertake their duties as woodmen?—Yes, there are many who have been regularly trained as foresters, and they are competent to take the management of woods.

1347. In England?—Yes.

1348. Have you practically trained young men on Lord Mansfield's estate in the same manner that Mr. Thomson has done at Lord Seafield's?—Yes; I always kept a certain number of young men.

1349. Were they merely labourers, or were they apprenticed to you in any way?—We have very few labourers. They are all young men, assistant foresters.

1350. Do they come to you for a certain time?—They come for a certain time; some of them serve a regular apprenticeship. I have some from England just now.

1351. Have they had previous experience in wood management before they come to you?—Many of them come as journeymen; but I train a number of young men from the commencement. Some of them stay three, four, five, and six years.

Chairman—continued.

1352. Do you consider when they leave you that they are capable of managing woods without any further theoretical instruction. Do you consider that their practical knowledge is sufficient to enable them to manage woods skilfully without any theoretical instruction?—I consider that many of those who remain for four or five years are very competent when they leave me.

1353. Do you think a school of forestry is really required in Scotland?—Well, I do not think a school of forestry would be very well supported.

1354. Do you think, independently of the measure of support it might receive, it is really required?—Young men training for the Indian forests might take advantage of it, I have no doubt; but the truth is that foresters in Great Britain are not very highly paid, and they cannot afford to acquire very expensive education.

1355. Do you think it would be sufficient for present purposes that young men should receive a practical instruction for woods such as those of Lady Seafield's, and Lord Mansfield's, and others?—I do.

1356. And then go to Edinburgh and complete their theoretical education in the manner which has been suggested?—I think they could be sufficiently trained as practical foresters without a forestry school.

1357. Do you think that through the agency of the University of Edinburgh and the Highland Societies examination, there would be sufficient provision made for the necessary theoretical instruction?—I do not think there would.

1358. You think that there would be something more required than the advantages which the University of Edinburgh would afford if there was a Chair of Forestry?—If there was a Chair of Forestry.

1359. Without it you think not?—I think a chair combined with the Agricultural Chair might be quite ample.

1360. There is a Chair of Agriculture?—I think there is.

1361. To that you would attach a Chair of Forestry, that is to say that the same person, the professor of agriculture, should also instruct in forestry?—I should think so.

1362. What is your experience as regards the profit on timber growing; do you think, at the present time, with the drawbacks of preferential rates and foreign competition, that really timber can be grown to a profit?—Foreign competition is the ruination of our own timber I know.

1363. But with all these disadvantages do you think still that there is any hope of growing timber in Great Britain and Ireland at a profit?—Yes, I think that timber may yield a pretty good return if well managed. There is a great

Chairman—continued.

mistake frequently made in not planting the proper tree. It is a crop that cannot be altered for the first 50 or 60 years; and the right tree should always be put into the right place.

1364. Then who are the persons who should direct that proper selection; the factors, I suppose, or the land agents of estates?—Well, I do not think the factors are very competent.

1365. But they are the persons who naturally would make the selection?—There is frequently advantage taken of that by such as Messrs. Mac Gregor and Thompson, and myself. We, and such as we are, frequently go to give advice; I have been employed on the estate of Lord Dalhousie; I have laid out 22 sites for new plantations varying from 10 to 200 acres each.

1366. But I suppose by some system of instruction the factors, who are really responsible for this selection of the trees and the supervision of the plantations, could be made quite capable of managing woods without the special advice of such gentlemen as yourself?—It is very rarely that factors have experience in selecting trees for growing. For instance, taking land going to be planted, if my opinion was to be asked I should say on some lands, "plant larch and Scotch fir intermixed in equal quantities;" on other lands I would recommend silver fir to be planted for a permanent tree, and so on.

Mr. *Munro Ferguson.*

1367. You have had a good deal of experience with the Douglasii fir?—Yes.

1368. Have your plantations succeeded?—They are doing remarkably well. I think Lord Mansfield's are the most extensive plantations of the Douglasii tree I know.

1369. Have you suffered much from trees being blown down with wind?—No. There is one plantation on which a good many were blown down; but there is one on the side of the railway to Dunkeld that has never had a tree blown down there. There are eight acres of it. It is a pure Douglasii plantation. It was thinned in the spring of the year. We have taken 620 trees out of it; and they are the largest of their age I ever saw. They measured about 60 feet in length; they are 27 years of age; many of them girth 5 feet 9 inches in circumference 3 feet above the ground; I never knew that in any *coniferæ* tree before. There are two trees of the Douglasii fir growing on the estate of Lyndoch; and when they were 50 years of age they were 73 feet in length. These trees measured 150 feet of timber each. The larch is a very fast-growing tree; and very rarely indeed have I found a larch 50 years of age to measure 50 cubic feet of timber; but in Douglasii they have added three cubic feet for every year they stood.

1370. Have you put any Douglasii timber into the market?—This is the first lot that has been thinned out; I have sold individual trees, perhaps a score at a time, but this is the first lot of any consequence.

1371. Is it your experience that plantations

Mr. *Munro Ferguson*—continued.

in Perthshire have suffered much from game?—They have suffered very much.

1372. There has been great loss by game?—Great loss. The rabbits and hares will eat the bark of trees from 80 to 100 years of age, elm, ash, and beech. I have seen them peeling them, forcing themselves up as high as they can, and not leaving any of the bark two feet above the surface on.

1373. You find game is very prejudicial to forestry in Perthshire?—Yes, very.

Mr. *Egerton Hubbard.*

1374. How many acres did you say this Douglasii plantation extended to?—This is a small plantation of eight acres.

1375. Can you tell the Committee what it cost to plant all those eight acres of Douglasii?—We reared the plants from seeds, and the planting cost about 10 *s.* per acre.

1376. What did you get for the 620 trees that you sold?—They are not sold; they are laid down in lots at the present time. They have just been very recently thinned.

1377. What do you expect those will fetch? Have you made any estimate?—Well, it is a kind of tree the value of which is not known, and I do not know how they will sell; but I should hardly expect that they would sell for as much as the larch spars do. I do not think they will; they are not so high. We should get 4 *s.*, or 5 *s.*, or 6 *s.* per run of 100 feet for them.

1378. Have you any experience of making a plantation with borrowed money?—No.

1379. Can you imagine any man who would borrow money from the Government at 3 per cent. and make it pay?—Well, it might pay; but it will take a considerable time before it does. Perhaps this paper may be useful. Lord Stormont wished me last year to draw out a note of what 20 acres would cost, and what they might realise in 80 years. I have drawn out this paper here for Lord Stormont; and the result was for larch. Perhaps I may read it.

1380. Yes; pray do?—It was 20 acres of land to be planted under larch.

1381. Will you give us the heading?—First of all, there is the cost of fencing 20 acres, 41 *l.*; cost of plants, 25 *l.*; cost of planting, 8 *l.*; rent of 20 acres at 10 *s.* per acre, 10 *l.*; that amounts in all to 84 *l.* Then there is compound interest on above 84 *l.* for 12 years, that is, 126 *l.* 8 *s.* 7 *d.* Then, first, thinning at 12 years of age 4,000 trees at 1 *d.* per tree, 16 *l.* 13 *s.* 4 *d.*; deduct cost of thinning, 8 *l.* 6 *s.* 8 *d.*; deduct balance in favour of thinning, from 126 *l.* 18 *s.* 7 *d.*, and then that leaves 118 *l.* 11 *s.* 11 *d.*

1382. Can you tell us how much an acre you made it at the end of 80 years?—At the end of 12 years, 16 *l.* 13 *s.* 4 *d.*, for the 20 acres at 1 *d.* per tree. Then I take the 118 *l.* 11 *s.* 11 *d.*; at 17 years of age, compound interest for five years, 130 *l.* 2 *s.* 10½ *d.*; at 17 years of age, second course of thinning 300 trees per acre, 6,000 trees at 2 *d.* per tree, 50 *l.*; cost of thinning, 25 *l.*; deduct balance in favour of thinning, 25 *l.* Then

it

Mr. *Egerton Hubbard*—continued.

it reduces it to the amount of 105 *l.* 2 *s.* 10½ *d.* Then taking 105 *l.* 2 *s.* 10½ *d.* at 22 years of age, compound interest at five years, 124 *l.* 14 *s.* 1½ *d.*; third course of thinning 8,000 trees at 4 *d.* per tree, being at the rate of 400 trees per annum, 133 *l.* 6 *s.* 8 *d.*; cost of thinning and repairing fence, 50 *l.* 16 *s.* 8 *d.*; deduct balance in favour of thinning, 82 *l.* 10 *s.*; then that reduces the amount to 42 *l.* 4 *s.* 1 *d.* for you to charge compound interest on. At 30 years of age the interest is wholly paid off, because the planting and everything is paid off in 30 years. It is like 30 years' purchase. Then at 30 years of age balance in favour of plantation, 57 *l.* 3 *s.* 10½ *d.*; at 37 years of age, 200 trees per acre, that is 4,000 trees at 2 *s.* per tree, 400 *l.*; deduct cost of thinning, 33 *l.* 6 *s.* 8 *d.*; balance in favour at that age, 366 *l.* 13 *s.* 4 *d.* At 45 years of age 100 trees per acre, 2,000 trees at 2 *s.* 6 *d.* per tree is 250 *l.*; cost of thinning, 31 *l.* 5 *s.*

Chairman.

1383. You need not read all the figures; can you give us the total result?—The result is, "Matured crop at 80 years, 130 trees per acre, in all 2,600 at 20 *s.* per tree, 2,600 *l.*, and the total amount in favour of plantation is 3,217 *l.* 12 *s.* 2½ *d.*" That leaves exactly 2 *l.* per acre of rent throughout for the land.

1384. Throughout the period of how many years?—Eighty years.

1385. Will you hand in that document?—Yes. (*The same was handed in.*)

Viscount *Ebrington.*

1386. Have you allowed anything for rates and taxes in that estimate?—The rent is calculated from the commencement.

1387. But there are rates to be paid every year upon it?—The rates are not included. The rates on plantations in Scotland are very small.

1388. You make no allowance for that, do you?—There are no rates mentioned.

Dr. *Farquharson.*

1389. You said you did not think that there would be enough demand for a School of Forestry in Scotland to make it pay?—Well, I scarcely think it.

1390. Do you think there would be enough demand to make it desirable for Government to pay for it?—If there were established a forest school, and if there was a large Government forest in connection with it, I believe it might be taken advantage of, and be of great service in training young men.

1391. If there were established a school in connection with some of your large woods in Scotland (for instance, your woods), do you agree with Mr. Thomson, who said that the difficulty would be that one proprietor might approve of such an arrangement, and that his successor might not?—I do not know really that it would be taken advantage of as it ought to be.

1392. Do not you think, if you had a forest school on a small scale attached to some of your large woods in Scotland, that the proprietor would be at the advantage that it would guarantee

Dr. *Farquharson*—continued.

that the woods would be thoroughly well worked, and that it would be a guarantee for the scientific management of that particular wood?—I believe it would be advantageous.

1393. I believe you have nothing to tell us about the commercial value of the Douglasii pine?—No, I cannot say, because it is a new kind of timber; it has never been brought into the market, but I have tried it in fencing and for gates and gate-posts, and it has been found to do very well. We had some fine trees blown about 11 years ago, and I got them cut up into wire fence posts, and they have been put into wire fences. They are still remaining in the wire fence as posts (that is 11 years ago) wearing twice as long as Scotch fir would.

1394. You think it is a good quality of wood from what you know?—I think it is.

1395. It is not subject to any disease like the larch?—It is a tree that is almost exceptionally free from insects. I do not know a single insect that is peculiar to it.

1396. Have you any plan to suggest, short of a Forestry School, as to any smaller school than a Forestry School at which young forest men, getting from 70 *l.* to 80 *l.* a year, would receive a better training for their work?—Well, I do not think that the ordinary teachers can teach much of the science of forestry.

1397. They have not been trained themselves, in fact?—I do believe that if young men are very well educated, and properly trained, and serve a regular apprenticeship, they would come out very useful foresters for anything either at home or abroad.

Viscount *Ebrington.*

1398. Do you find silver firs worth anything as timber?—Yes; about eleven years ago I could not get reliable information as to how they would work as railway sleepers, from engineers or foremen over the surface men of railways. I got four silver fir sleepers cut, and they were laid when they were laying sleepers four miles out from Perth; they were laying new Baltic sleepers, and I got the engineer to get them laid at the same time. They were laid eleven years last April; they are still in use, and most of the Baltic sleepers were thrown out three or four years ago. I believe that those sleepers will wear for four or five years yet.

1399. Do you know whether the value of these foreign fir trees varies a great deal according to the locality and the soil in which they are growing?—Do you mean foreign?

1400. I mean your silver fir. That is not an English tree. The general experience of it is that it is inferior as timber, is not it?—The quality depends a good deal on the soil and the climate. For instance, Scotch fir that is grown in Scotland is a great deal richer, and more full of resin, than a Scotch fir grown in England. If you split up a bit of old Scotch fir it will blaze like a candle, it is so rich and full of resin. That is not the case if it is grown in England, as far as I have seen.

1401. What sort of soil were these silver firs grown in that made such good sleepers?—The subsoil is till, and in the North of Scotland it is

Viscount *Ebrington*—continued.

on a granite or rocky foundation, and that produces a very rich Scotch fir.

1402. I asked you what sort of soil were these firs grown in that you cut such good sleepers out of?—Well, the subsoil is stiff till soil; a good rich loam the surface was.

1403. They were grown in good land?—They were grown in good land. I believe these silver firs are likely to wear out larch sleepers; larch sleepers stand on an average eight or nine years, and these silver firs have been in 11 years. There was nothing applied to them, no creosote, or anything of that kind.

Mr. *Evelyn.*

1404. I rather collected from you that the higher the latitudes where the Scotch fir grows the better the quality of the timber; is that so, that in Scotland it is better than in England?—I did not say that the higher the latitude the better the timber; but the quality of Scotch fir is generally very good upon high altitudes.

1405. But Scotch fir grown in Scotland is better than that grown in England?—Yes, it is.

1406. Because it is a more northern climate, I suppose, and more suitable to it?—Yes, I believe it is, and there is something in the soil in Scotland that produces a rich timber full of resin.

Mr. *Evelyn*—continued.

1407. You have spoken of the Douglasii fir tree. You have a high notion of its value, and you have also spoken of the silver fir. Have you any experience of any other of the foreign *pinuses* recently introduced; for instance, the Corsican pine?—Well, the quality of the timber of the Corsican pine is something the same as the Scotch fir; it grows very rapidly, but it is a very shy grower. When planted out into the forest a great many die. They are very bare of fibrous roots. It is a very difficult tree to establish, but when they are once established in the forest they grow very rapidly, and I believe it is going to be a very good timber tree.

Viscount *Ebrington.*

1408. Have you any experience of the Sequoias or Wellingtonias?—Yes, but it will never be a good plantation tree nor very ornamental; it tapers so much. It would not cut up advantageously.

1409. I mean what they call in America *sequoia sempervirens.* They find it a very useful tree in America. Do you know it?—Do you say the Wellingtonia?

1410. It is half-brother to the Wellingtonia. You do not know it?—No.

Mr. ROBERT DUNDAS, called in; and Examined.

Chairman.

1411 YOU are of Arniston, near Edinburgh?—Yes.

1412. I believe you are a landed proprietor of large extent?—Yes.

1413. And also a colliery proprietor?—And a colliery proprietor; both.

1414. You have been kind enough to furnish us with the heads of some evidence which you will be able to give us. Perhaps you will kindly give us your views upon the main part, relating to whether there is a profit or not arising from timber growing, and secondly, as to forestry schools, and your views upon that?—Quite so.

1415. Perhaps you will give us your views upon those subjects successively?—I ought to explain to the Committee that I have not come as an expert witness, because the Committee will have had already quite enough of professional evidence, and better evidence than I can give. My evidence is only as a country gentleman, taken quite unprepared. I have no papers with me in London, and I have nothing to refer to to prepare my evidence, so that what I am going to state to the Committee is merely what any country gentleman from the nearest club in Pall Mall offhand would state. Beginning with the growing of timber as a crop for profit, I think the great difficulty of late years, which has made it so unprofitable, arises first of all from the abolition of the duty upon timber at the time of Sir Robert Peel's tariff. I had something to do with it before that. During my minority my guardians cut a considerable quantity of timber; in fact, about 10,000 *l.* worth, on my estate, in

Chairman—continued.

two years. I mention that because I was asked at what sort of age timber came to a profitable growth. In that case there was some of it 110 years old, but a good deal of it, all which brought the largest prices, was very fine oak and sycamore of great age, which, in the days of a heavy timber duty, fetched a very large price. The same quantity and quality of timber cut now would not fetch half what it did 48 years ago, so that the abolition of duty on foreign timber had a very serious effect on the home-grown supply and the prices to be realised for it. But what I think has had a far greater influence upon home-grown timber, and which is quite fatal to it as a crop, is the cheapness of iron and the wonderful skill shown by mechanics in metal now-a-days. In fact everything which used to be done with timber, from an Atlantic steamer down to a little music stand, is now made of metal, and is cheaper and better than wood. I see no prospect of that ceasing; on the contrary, if there were to be any rise in the price of wood it would only stimulate the competition of metal for all purposes, so that I think metal is the great obstacle which growing timber at home has to contend with. Of course, one must not leave out of sight the rise in wages during the last half-century. That adds very largely to the expense of growing timber at home, because in the foreign countries that we have to compete with, principally in the North of Europe, the wages and mode of living is on a far cheaper scale than it is in this country, and to compete with Norway we should have to see wages and the mode of living in this country brought

Chairman—continued.

brought down to the scale of Norway, which we are never likely to see, at least I hope not. The extent to which machinery is now employed for the conversion of foreign timber for builders' purposes, is injurious to home grown wood as a profitable crop. When I first had to do with wood selling the number of small merchants who bought wood at local sales and sawed it up and worked it up for country purposes, was very much larger than now. I am speaking of my own district The trade has gone from the country districts, and is concentrated now in the seaport towns, in very large establishments, with extensive and costly machinery. I may say that to such an extent is that the case, and so much cheaper, in my opinion, can these great establishments for converting wood turn it out, than one can do for oneself at home, that I buy all that I require, as far as possible, ready sawn into the shape in which I want it. In fact, only a week ago I happened to require a little ornamental gate of oak wood. I had oak lying at home, and a sawmill, but I found that it would cost me more to take two or three trees, and saw them up into the different shapes that I should require, than to go to a large mill with the list of sizes specified by the architect, and have it sawn for me and sent down. I did this, and I was quite satisfied with the result. I got it cheaper from the large mill than I could have sawn it for myself at home. In fact, after a long experience, I do not think I have ever built a cottage or a farmhouse, or any building of that sort, with home-grown wood. I always use foreign timber, sawn up ready for use at the large sawmill; any wood of my own that I use is for the very smallest and most insignificant of repairs. Any house, or any considerable repairs, I always have done with Baltic wood. I do not think I have ever built a house with my own wood. Then I was asked a question about the age at which timber ripened in Scotland. That is a matter which is very important in dealing with wood as a profitable crop. In all the calculations made by foresters, which I was very much accustomed to when I was young, because, for the first 12 years of my life as a country gentleman, Mr. Brown, who was the author of a work on forestry which I daresay some of you are acquainted with, and I believe it is still considered the best book, he was my forester, and I learnt anything I know about wood from him. I trusted entirely and implicitly to him. But all his calculations were based upon the returns to be got from thinning as the wood went on; so much when the wood was 15 or 20 years old, and considerably more when it was 30 years old and so on. My experience, I must say, is that these calculations have not been borne out; that the price we get in Scotland, at least in my part of Scotland, for all young wood is miserably small. It barely pays the cost of cutting and dragging it out of the wood. A great deal of that is owing to the climate of Scotland: I do not know whether it is the case with you, gentlemen, when you have been abroad, but I have noticed that in the German forests, for instance, the

Chairman—continued.

wood is very much cleaner grown. The summer there is much drier than ours. Foreign wood is better ripened, and altogether it is not the same sort of raw white material that a young Scotch fir or a young Scotch spruce is, which really, with wages as high as they are now, is scarcely worth while converting into anything. I lay before the Committee a note of the prices the Lothian Collieries are paying for propwood, which is really the poorest sort of wood, but which a good deal of the Highland thinnings is used for. My correspondent states: "In reply to your letter of the 24th, foreign propwood, 3 inches at small end and an average length of 12 feet, can be got delivered here at 4*s.* 2*d.* per 100 lineal feet. We have just bought a cargo 17 feet average" (that is the average length), "at 4 *s.* 7 *d.*; this is a long average," meaning 17 feet is above the average; "and we expect it will be a very superior lot. Since we bought this 10 days ago we have even a lower offer of a cargo 17 feet average at 4 *s.* 5 *d.* per 100 feet." The letter goes on to say, which is really going to the root of the whole matter, "Foreign propwood, as a rule, is preferred to home; it is straight, clean, and much handier to work with, and there's no waste in cutting it to the required lengths." That just repeats, in a business man's words, the remark I was making about what had struck me in comparing the wood grown in the German forests with our own at home; that the foreign wood is so much straighter, cleaner, and better ripened than home wood. As to the price of home timber, round and in the rough state, the following are the prices ruling: "heavy larch, 10 to 15 inches on side, 1 *s.* 2 *d.* per cubic foot; smaller larch, 7 to 10 inches on side, 11 *d.* per cubic foot." Scotch fir, which is really the principal wood which is grown in Scotland: "10 to 15 inches on the side" (that is a good-sized stick), "only 8 *d.* per cubic foot; 7 to 10 inches on side, 6 *d.* to 6½ *d.* per cubic foot; spruce, large sized, clean and straight, 5 *d.* per cubic foot;" and he adds, "these prices are all delivered at the works here." So that the seller, besides getting these miserably small prices, has further to pay the cost of delivery, of which I have a further note from my own forester, who sells a good deal, and he says it takes from 1 *d.* to 2 *d.* a foot off these prices which I have read for delivery, to that extent reducing the prices still further to the grower. I do not think that it is possible at these prices to grow wood at a profit. I made a calculation a good many years ago, when Mr. Brown was my forester. He was very much employed by the Woods and Forests Commissioners in giving them advice, and in reporting upon the woods in the New Forest and elsewhere, and they were good-natured enough to send me some of the forms in which their accounts were kept, because I had always felt it difficult to ascertain whether a wood really paid or not. I kept my own accounts for a good many years, till I got tired of it, on the same plan as the Woods and Forests. Not long ago, I do not know exactly what year, but I think five or six years ago, there was a Return laid before Parliament,

Chairman—continued.

in which, I think, the wood in the New Forest returned about 5 *s.* an acre. That was the return of profit, but the paper added that it was some years ago, and that, with prices going down, it would not yield that return now; so that I suppose, taking the New Forest now, it makes an average of about 4 *s.* an acre, or, say 3 *s.* 6 *d.* My own calculation to a certain extent corroborates that. I took a certain number of years, and calculated as well as I could, and made out that I got a return of 2 *s.* 6 *d.* an acre. Then the New Forest, of course, is in a much better climate, and it is a much better quality of wood. In the New Forest there is always a certain quantity of large timber included in their annual sales. I have not cut any large timber for a great many years. I think that there are very few estates in Scotland where 3 *s.* to 4 *s.* per acre would be exceeded as the return from wood. I do not think it can be more. That is all that, off-hand, I thought of saying before coming here, but if there is any explanation wanted I shall be happy to give it.

Viscount *Ebrington.*

1416. Where is your colliery?—About 12 miles from Edinburgh.

Mr. *Egerton Hubbard.*

1417. Who buys your home-grown timber?—Small country merchants. I buy for my own use Baltic timber, sawn as nearly to shape as possible, and I sell my own rough for what it will fetch, and that is very little.

1418. What do they use it for?—They use it for very inferior kind of work, small inferior repairs, and work for which their country customers would, perhaps, grudge the expense of good foreign wood, but I never, as far as economy goes, would use home wood in preference to foreign.

1419. Is it that the foreign wood is better seasoned?—It is better ripened; it lasts much longer. Young Scotch wood rots and decays so soon, and as one of the great expenses is the sawing it, and the conversion of it, and as wages are high, it is better to start with good sound wood than it is to use soft rotten stuff which costs as much to saw it, and convert it, and will decay in a few years.

1420. Your woods are on rather rich soil?—On every kind. My estate slopes upwards, and on the lower part of it I have as fine wood as anybody could wish to have. On the upper part I have miserable stunted Scotch fir that will scarcely grow at all.

Mr. *Rankin.*

1421. Your opinion is, that on land which is worth more than 3 *s.* an acre it is hardly worth growing timber in Scotland?—No. I have a very strong impression of the uselessness of trying to plant timber on bad land. It used to be an old idea a century ago, and I have seen in old plans certain pieces tinted brown, and marked "Wet land, to be planted." I am certain it is throwing away money to grow wood on such

Mr. *Rankin*—continued.

land; timber growing requires good land, and a fair climate,

1422. Land that you could let, probably, for more than 3 *s.* an acre?—Yes.

1423. Then it does not become profitable to grow timber?—No, it does not become profitable to grow timber. I think there is great exaggeration in the talk there is about the number of acres which might be profitably planted; I do not think, from the soil and climate, they could be; and then the distance from a large market always is fatal. Baltic wood is brought over so very cheap that Highland wood, which is the only wood that could be planted on a large scale, is at a disadvantage, because, although the distance is much shorter, the expense of carriage becomes so heavy. In Norway they get it on board ship at once.

1424. Do you think it is the duty of the State to undertake to give a subsidy for the sake of encouraging the growth of wood?—No, I do not think so; I think it would be a fatal mistake, which would be certain to end in failure.

1425. Do you think they should give any subsidy to a school of forestry?—No. I have made a few jottings about that.

Chairman.

1426. We will come to that bye-and-bye?—Very well.

Mr. *Munro Ferguson.*

1427. May I ask what the rental of land is in your neighbourhood?—Round about where my wood is?

1428. Yes?—It varies; it is difficult to say what anybody's rental is just now.

1429. I suppose it is very much better land than the Highland land that you have been alluding to?—Yes; the upper part, I daresay, may be worth 10 *s.* an acre as pasture. Of course, as you come down lower you get to 30 *s.* an acre; but then, when it is as good as that, I do not plant except here and there for ornament.

1430. Are your woods in a large block?—No, they are not; they are principally for shelter for the adjoining farms and river glens.

1431. What sort of size are the plantations?—Comparatively small when you take them in comparison with Highland woods. I have not above 800 acres altogether.

1432. Is that pretty much together?—No, it is scattered up and down.

1433. How do you sell your timber; do you sell it by auction?—By auction.

1434. Your opinion is that 6 *d.* a foot for Scotch fir timber would be an unremunerative return?—Quite unremunerative.

Chairman.

1435. Then I will now ask you to give us your views as to a school of forestry?—Well, as to that, there has been a great deal of talk about schools of forestry, but I think the want of them has been much exaggerated; I do not think there is the real want that is stated. People go about, and they see woods that are neglected, and it is put down at once to want

Chairman—continued.

want of scientific knowledge on the part of the foresters, but the fact is that the bulk of the woods we see neglected now-a-days is due to the unremunerative nature of wood growing, and because the owners cannot and will not throw away good money after bad in keeping them in order; that is really the cause. Then with regard to one or two other points. I think there never was a time when in Scotland, at least (the only part I can speak about), the foresters were such a thoroughly highly-educated intelligent set of men as they are just now, I think they are thoroughly up to their work. You may give them, of course, a little scientific training on the top of their practical knowledge; but I do not think there ever was a time when there was a more highly educated and better set of men than the Scotch foresters are just now. Then there is one objection which strikes me at once to what are called the Schools of Forestry, and that is the large expense it would be to the country in establishing them and keeping them up when once they were established. I do not think that a young man would learn his work so well in what would be a school of forestry, as he would as an apprentice under a thoroughly good forester on a well-managed estate. I saw a good deal of that when I was young, because Mr. Brown, my forester, of course became very well known all over both England and Scotland, and numbers of lads came to be trained under him and to learn their work. In fact the demand on him to supply foresters was so great that they were, many of them, not quite long enough there who were sent out; but he turned out a great number of first-rate men who to this day, many of them (and I think it is 40 years ago), are up and down different parts of England and Scotland. In fact the only possible plan of training a set of good foresters is by apprenticeship on a large estate under a thoroughly good man. That would take a man on to say 21 or 22 years of age. Then if it was thought desirable he might go to any of the institutions. The Scotch Universities are the cheapest places for instruction you can have, and in England there are now arising similar institutions here and there where scientific training is given at a very cheap rate. That might follow the young foresters' five or six years' learning of the work under a thoroughly good practical man, but I certainly should be sorry to see any attempt made at starting a school of forestry without first of all trying the plan of utilising the institutions which are in existence, such as the Scotch universities and the training institutions in different parts of England. I have had a little experience about that. I am patron of a few poor bursaries in the University of Edinburgh, and small as they are (they are only 20 *l.* a year) there is always a number of candidates. It shows that the system of establishing bursaries, if that were tried, need not be very expensive to the nation; there is always a great competition to get these little 20 *l.* bursaries. Occasionally I have applications from men who have been in trade, artizans who for some reason of their own wish to get a scientific training, or even occasionally they wish to go out as missionaries and to get training for Church work

Chairman—continued.

afterwards. But the main point is that I think 20 *l.* or 25 *l.* a year would be sufficient to enable a lad, after he had learnt his practical work thoroughly, to go to Aberdeen or Edinburgh and to get what additional scientific training might be thought desirable there. I think that the nation would get far more for their money in that way than they would by establishing a school of forestry. I think schools of forestry would be very expensive, and I do not know that they would turn out good results. Of course one must also keep in mind that the number of foresters for whom places are to be had is very limited; it is only upon a large estate that remuneration can be given for a well-educated forester. I think there would scarcely be openings if schools of forestry were established upon a large scale for the lads that they would turn out. Then as to teaching boys at parish schools or public schools of forestry and agriculture I have no idea that that would answer. I think a lad, if he intends to take to farming or forestry, must learn the practical part first of all and then get any scientific addition to it later in life when he is able to take it in better. I think as far as forestry schools go what I have said explains my view.

1436. May I ask what bursaries are. Are they what we should call exhibition scholarships?—Yes.

1437. They are established by some money being left, and they are obtained by competitive entry?—A great many are by competitive entry. These I speak of are in private patronage.

1438. You are aware that the Highland Agricultural Society have taken up the subject of forestry?—Yes. I have been taking a leading part for many years in it.

1439. And a certain amount of value is attached to those who have gained their certificates?—Yes. But if there is anything to be done in the way of forestry education I think it would have to be by establishing bursaries or some mode of that kind.

1440. Young men might, after working a certain time upon a large estate, if they obtained any of these bursaries, supplement their instructions?—Yes, quite so, by a session or two. I am not speaking at random on this question, because I have known several cases of farmers' sons who, before beginning regular work, have gone to the University of Edinburgh for one or two winters, simply to get scientific teaching on the top of what they had acquired with their fathers on the farm, and in one instance I knew the son of a forester who did the same.

1441. But then there must be somebody capable of giving the scientific instruction, a professor of forestry, attached to the university?—Yes. There are many of the Chairs in the Edinburgh University which could be utilized for any such purpose.

1442. The instruction in forestry might be combined with agriculture?—To begin with, there is a Chair of Agriculture and Rural Economy. Rural economy ought certainly to include forestry. The Professor is a young man

Chairman—continued.

newly appointed, and I should say he ought to be perfectly able to take in hand both forestry and agriculture. Then at the same time there is geology, botany, natural history and chemistry. I think the great advantage to young men of getting a course or two is that although they may not go very far into the science it teaches them how to observe. The want of accurate observation is a great drawback to foresters and farmers. They have never been taught to use their eyes in matters of minute detail, especially as to the causes of diseases of wood and the diseases of plants. It is very difficult to get ar accurate account of what the man really sees unless he has gone through a certain amount of training to fit him for accurate observation.

Mr. *Munro Ferguson.*

1443. Would not that accurate observation be fostered by a school of forestry?—Of course it would, but when you have got an institution like the University at Edinburgh and the University at Aberdeen, where you have a staff already at your hand, it would be rather an expensive way of going to work to start another one. My point is, that at all events before starting a school of forestry the teaching of forestry should be attempted in combination with the existing staff at Aberdeen or Edinburgh, both of which are within reach.

1444. Would not the absence of woods from the neighbourhood of Edinburgh and Aberdeen be a drawback to that?—No, I do not think so, because I am contemplating that the young men who go there simply go there for a winter course, and that they have been five or six years at the practical part of their business and have learnt that already.

1445. Then with regard to the expense, you spoke, I think, of the very large expense of a school of forestry?—Yes.

1446. The evidence that we have had points to some 600 *l.* or 700 *l.* a year as being necessary for salaries. I suppose you would not regard that as very heavy?—I do not see how anything worth establishing could be done at that sort of price.

1447. With regard to your own words, I suppose we may assume that they were planted more for the purpose of shelter and ornament and for unremunerative purposes, than for commercial purposes?—Quite so; but taking it along with what I have stated, that I am much more a wood purchaser than a wood-grower, at the price I am buying at I cannot see how Highland proprietors can grow to a profit.

Mr. *Rankin.*

1448. Can you tell us what you charge against your wood before you say you sell at no profit. Do you charge the rent of the land and the cost of preparation of the land?—I should not like to say off-hand. It is some years since I have seen the memoranda I made. I do not think I have put the rent of the land; that would simply swamp the thing altogether; it is bad enough without that.

1449. We have had it in evidence that it costs more to plant a small area than to plant a large area?—Yes, naturally it would be so, because when

Mr. *Rankin*—continued.

planting a small area, the fencing comes very much more expensive.

1450. Do you ever sell pit-props of your own growing?—Yes, every year I do. I sell all that I have.

1451. For pit-props?—Yes; because there they are, and no matter whether one loses or not, they must be sold whatever the price may be.

1452. What timber is used for that?—Scotch fir is used for pit-props; any wood, in short, which is three inches across at the smallest end; but, as my correspondent in his letter states, foreign wood is the best of the two, because it is much cleaner and straighter grained than the Scotch wood.

Mr. *Craig Sellar.*

1453. Do you know whether the Agricultural and Rural Economy Lectures are well attended?—That I do not know. Professor Wallace has been a very short time in the Chair, and the class had gone down very much before he was appointed.

1454. His predecessor had not a large attendance?—Under his predecessor it had not answered well; I think there is no reason why the Professor of Agriculture in Edinburgh should not also teach forestry; none.

1455. Do you know what class of men go there as students?—Well, the bulk of them, I fancy, are those who are intending to be land agents, and I suppose a certain number of the higher class of farmers' sons.

1456. Your idea would be that lads who were to become foresters should have their practical training under an existing forester in some of the large estates?—Yes. With regard to practical knowledge, they should be thoroughly up to their work before they leave the man under whom they are being trained.

1457. And then get scientific training?—And then get scientific training for a winter, or perhaps two winters. I would do it in the Scotch fashion, which is taking a half-year at a time. As you know, there are many Scotch lads who cannot afford a whole year, and they work during the summer, and they go to the University and get their class lectures during the winter. That is the only practical way of giving scientific training to a forester.

1458. You think they should attend the lectures of the agricultural professor and also lectures in chemistry?—And botany and natural history.

1459. What rate of fees would they pay, say for a course of lectures on agricultural?—That I am not able to say.

1460. Three guineas a course?—I do not know how much it is; it is not much. It cannot be much from the very poor class who sometimes attend.

1461. Probably it would be about three guineas a course?—Probably.

1462. You think that would be preferable to starting schools of forestry?—Much preferable.

1463. But that is only with regard to Scotland?—Yes; I do not mention England because I know comparatively so little about these details there. Is not there Owen's College at Manchester, and are there not institutions springing

Mr. *Craig Sellar*—continued.

springing up of the same description practically as the Scotch universities up and down England which would answer the same purpose.

1464. Have you had in view at all the training of students who would go out to India to attend to the forests in India and the Colonies?—No, I was thinking only of those who would be employed at home.

1465. Of course, that is a much wider question altogether?—A much wider question.

1466. You consider on the other point that

Mr. *Craig Sellar*—continued.

owing to the substitution of metal for timber, and the other causes you have mentioned, that planting on a great scale cannot be remunerative in Scotland?—Impossible; it is simply impossible; that is my opinion with the extent to which metal every day is being used. There is not a day passes in which you do not see some new inventions in metal as a substitute for wood. In fact, as I said before, metal is used for everything, from an Atlantic steamer to a music-stand. I mean the use of metal is universal now.

Wednesday, 6th July 1887.

MEMBERS PRESENT:

Mr. Biddulph.
Mr. Evelyn.
Dr. Farquharson.
Mr. Egerton Hubbard.
Colonel King-Harman.
Sir Edmund Lechmere.
Sir John Lubbock.
Mr. Fuller Maitland.
Colonel Nolan.
Mr. Rankin.
Mr. Mark Stewart

SIR EDMUND LECHMERE, BART., IN THE CHAIR.

Rev. T. E. F. FLANNERY, P.P., called in; and Examined.

Chairman.

1467. YOU are the Parish Priest of Carna, County Galway?—I am.

Colonel *Nolan.*

1468. You have been a good while in Connemara, have you not?—Yes, I have been there about 10 years.

1469. Connemara is a very mountainous district, is it not?—It is a very mountainous district.

1470. Connemara extends over the whole west portion of Galway, and there is a class of land very much of the same character in Mayo, is there not?—In North Mayo.

1471. You have also heard, I suppose, that the west of Donegal, a great deal of Kerry and West Cork, is very much the same class of country as Connemara?—Yes, it is very much the same.

1472. So that although you know best West Galway and North Mayo, still your evidence would apply to every part of the mountainous districts of the west of Ireland?—I should say so.

1473. At the present moment in Connemara there is a considerable deficiency of timber, is there not?—Yes, there is a considerable deficiency of timber in Connemara.

1474. And the people would be reduced to great straits for wood if it were not for the drift timber that is thrown up by the storms in the Atlantic?—Yes, very much.

1475. But the drift timber is not sufficient for all the purposes that wood is wanted for, is it?—It is not; in fact we have found very little of it coming ashore of late years.

1476. I suppose you attribute the deficiency of timber in the west of Ireland to the absence of resident proprietors there?—That is so.

1477. The great amount of the planting is about the demesnes of gentlemen?—Yes, that is so.

1478. In fact, with the blasting winds on the coast of Ireland they have to be planted in tolerably large quantities together, and they prefer to do that about their houses?—That is so.

Colonel *Nolan*—continued.

1479. The timber is more scattered than it is in England; it is generally grouped about the houses of large proprietors, is it not?—That is so.

1480. In Connemara, there having been very few residents there, there is very little timber except on the immediate shores of Lough Corrib?—There is very little.

1481. But there is a good deal upon the shores of Lough Corrib, is there not?—There is.

1482. And it does very well there, does it not?—It does.

1483. It would be a great advantage, would it not, if this deficiency were removed by planting a portion of the mountains?—It would be of the greatest possible advantage to the people generally.

1484. Are there any evidences of Connemara having been in former times in a very different position as to woods from what it is now?—Yes; in several excavations large oak logs have been found, and also bog deal, and there is also a tradition amongst the people that so late as 20 years ago there were several woods in Connemara.

1485. Have you ever read that the woods were cut down in Cromwell's time for smelting iron?—I have read a letter about it.

1486. But there were some woods, and you will still see the stumps of the oaks sprouting up in the mountains?—Yes, I have seen some that remain to this day.

1487. You find it sprouting up in branches, do you not, to this day; I refer to the wild oak?—Yes.

1488. In a few places in Connemara trees are found, as, for example, round the Martin's place at Ballynahinch?—Yes, and at Glendallagh and Oughterard, and those have all thrived exceedingly well.

1489. So that there is nothing in the country which shows that there is any natural reason why the trees should not flourish?—No; they only require

Colonel *Nolan*—continued.

require protection by planting a good many trees together and by fencing, and there is every facility for ditch fencing, which can be easily made; so that there is every opportunity afforded for timber planting in Connemara.

1490. I suppose there were no roads at all in Connemara 50 years ago?—That is so; there was no railway and there were no roads.

1491. If there were a railroad made now, the timber would be able to reach all the markets?—It would.

1492. By any of the bays?—It would.

1493. Is shelter very much wanted in Connemara for cattle and other stock?—It is very much wanted.

1494. Do you think that a great benefit would be conferred upon the country in that way if there were masses of timber planted along some of the mountain sides?—It would be a very great benefit, and the land remaining would be drained; so that the land, even though not planted, would be rendered doubly valuable by planting the portion that would be selected for planting.

1495. In addition to that benefit the people want a great deal of timber, do they not, for wood for their boats?—They have a great many boats. The people live to a great extent by fishing; in fact they carry on every branch of fishing almost there, except that they have not developed the deep-sea fisheries, which we hope will shortly be developed; there is a very large lobster fishing carried on there.

1496. That requires a smaller class of wood, osiers or willows?—Yes.

1497. Have the people a very long way to go to get the osiers to make the lobster pots?—They have to go from 60 to 70 miles.

1498. Is it your opinion that if the wood were upon the spot it would tend to develope the fisheries?—It would; in fact it is difficult to find it in the woods even 60 or 70 miles away, the demand for it having been so great.

1499. In addition to that, Connemara is a very great tourist country, is it not?—Yes.

1500. But there is a notable deficiency of wood?—There is a very great deficiency.

1501. And it would be a great addition to the beauty of the place if they planted trees upon the mountains?—I think it would be the prettiest place in the United Kingdom if it only were planted.

1502. Have you ever considered the advantages that would accrue to the people in the way of employment if there were sufficient wood for the factories?—I have been giving my attention to that, and I find there is a factory at Tuam at present working.

1503. Tuam is not in Connemara?—It is not.

1504. But you know it well?—I know it well; it gives a great deal of employment; and if we had this timber planted in Connemara that class of trade would also be largely carried on in Connemara.

1505. The wood, I believe, obtained for this factory in Tuam is obtained exclusively, is it not, from the timber around gentlemen's houses?—It is exclusively.

1506. There being practically only one gentleman who used to live in Connemara in olden

Colonel *Nolan*—continued.

times, Mr. Martin, of Ballynahinch, there is now no longer any adequate supply?—There is not.

1507. With regard to planting, do you think there would be any difficulty in obtaining 30,000 or 40,000 acres of land there?—I think there would be no difficulty about it.

1508. Do you think that the landowners would be willing to sell it to the Government?—Certainly they would; in fact, I think the land most fit for planting could be obtained for 6 *d.* an acre per year.

1509. That is to say 10 *s.* an acre, taking it outright?—Yes.

1510. But you know that there is a large amount let at that rate, at 6 *d.* an acre?—Yes, there is already at this moment, convenient to the parish I am in, a large quantity of land which could be obtained for 6 *d.* an acre.

1511. Most of the land around the hill sides is suitable for planting, is it not?—Most of that land is suitable for planting except the peat.

1512. And there would not be much difficulty in draining upon those hill sides?—There would be very little difficulty about it. There is a natural fall, and you would only want a few surface drains to let the water out here and there.

1513. You are able to give very good evidence as to the feeling of the tenantry and the people; would they in any way object to this planting, or would they encourage it?—They would be very pleased to see it, because they have to go now 60 or 70 miles for the wood for their boats, and the cattle on the mountains would be sheltered at the same time.

1514. So that all classes in Connemara would be well pleased if they could see the Government or any large body undertake the planting of the district?—They would be very much pleased. The whole aspect of Connemara would be changed if certain portions, such as may be now contemplated by this Committee, were planted.

1515. And you think there would be no difficulty with the proprietors or with the people?—None whatever.

1516. And you know the people there?—I know them extremely well.

1517. I suppose you get labour tolerably cheaply there?—It is very cheap.

1518. But there is no such thing as a skilled forester in Connemara?—There are none.

1519. You would require skilled foresters to be imported there to select the most suitable ground for planting and to teach the people?—Yes, that is so.

1520. Have you seen the Scotch fir growing there?—Yes, I have.

1521. How does the larch do?—Very well.

1522. And the Austrian pine?—That grows very well.

1523. Does the oak grow there?—It grows very well.

1524. And the beech?—The beech also grows very well; in fact, up to this time there is no plantation in Connemara; whatever wood there is is very limited.

1525. I believe the bog land in Connemara is not like that in the rest of the country?—No; it possesses a great deal of inorganic matter.

Colonel *Nolan*—continued.

1526. You can see granite rock coming up in the middle of the bog?—That is so.

1527. So that trees would grow upon that moor land quite differently from what they would in the bog land in the rest of the country?—They would.

1528. You are also acquainted with the other portions of Ireland, are you not?—I am.

1529. Is it the case there that although you see large masses of timber around proprietors' houses, yet there appear also to be bare spots of eight or ten miles in extent without any timber, there being no gentlemen's houses?—Yes, the country appears to be planted irregularly.

1530. You say that land could be obtained there easily?—Yes, it could be obtained there easily.

1531. But not so cheaply as in Connemara?—Not so cheaply as in Connemara.

1532. But still land could be obtained in different parts of Ireland for about 5 *s.* or 6 *s.* an acre?—Yes.

1533. But nothing like the amount that could be obtained in Connemara?—No.

1534. Would there be such land between Athenry and Tuam?—A great deal of that land could be utilised for the purpose.

1535. Nearly every kind of tree grows well there, you say?—Yes.

1536. Do you think that the Government ought to undertake a scheme of planting in Connemara?—I really think it ought; I think it would be of the greatest advantage not only to the country and the people, but that, from a money point of view, it would ultimately pay, and pay well.

1537. You think it would pay or very nearly pay?—It would certainly pay in 20 years' time.

1538. It would be very difficult to organise a private company to undertake such a thing; the money would not come in for 20 or 30 years, and it would be difficult to raise the money by a private company?—I consider it would be difficult.

1539. Would it be impossible to raise the money in the district?—It would be impossible; it could not be raised at present.

1540. You have tried to raise money for works in Galway and one or two places of that kind, have you not?—It is quite impossible to raise any money in the district.

1541. So that if the money is to be raised it must be raised from the outside?—Yes, or by the Government advancing the money.

1542. The probability is that unless the Government will undertake a scheme of this kind it will not be planted for 20 years?—It may be; I do not suppose it would be planted for a considerable time, if ever.

1543. You think that it is a duty which the Government ought to undertake?—I think it is.

1544. And you think that in the end it would pay?—I think in the end it would pay; and I feel assured that if the Government took the circumstances into consideration, and examined the land in Connemara, they would have very little hesitation in ordering that planting should be adopted in Connemara.

Colonel *Nolan*—continued.

1545. If the Government wanted a wild place for the forest students to study in, they could not have a better place than in the west of Ireland?—They could not.

1546. And you think land could be got more cheaply there than in Wicklow, though in other respects this district is very similar to Wicklow, which would be another suitable district?—That is so.

Mr. *Biddulph.*

1547. With regard to the fencing round plantations, I presume they would have to be protected from cattle?—Yes.

1548. It is a difficult matter to keep the cattle out sometimes, and it is an expensive thing to put up fencing?—Yes; in certain parts of the country it is certainly expensive, but in Connemara it is not so expensive, for you can have a five-feet wall even of stone for about 4 *s.* a perch of 21 feet; you can have it done from 4 *s.* 6 *d.* to 1 *s.*, and that would include not what we call the perch in house measurement, but 21 feet long and 5 feet high; but it would be better and cheaper done by a bog ditch.

1549. Would that keep cattle out?—Yes, it would keep cattle out as effectively as a five-feet wall.

1550. You think it would be an advantage that the country should be planted?—It would be an advantage that the country should be planted, because the timber would be useful as well for boats and pots for the lobster fishing; they must get it somewhere; so that in that view the people themselves would aid in protecting the plantation, because it is for their own benefit.

1551. I am afraid people do not always do what is for their benefit; but if men were deprived of a large portion of a hill upon which they had been accustomed to turn out their cattle, would not that meet with dissatisfaction on the part of the people?—No; it is not contemplated that the whole of the land should be taken up. There are large ranges which are taken up by extensive graziers; they are no advantage to the people now, and the people would prefer that those lands, although they were not so convenient to themselves, should be taken up by planting; the people would offer no opposition to the land being planted.

Mr. *Evelyn.*

1552. Are there any traces of former woods or forests in Connemara?—In certain portions of Connemara there are still traces of the old woods.

1553. What were they said to have consisted of?—Oak is to be found in excavations, as I have stated already, and then you have the bog deal, that is to say, just the same as the pine.

1554. The climate is mild, is it not?—It is very mild.

1555. And the soil is well suited to the growth of trees?—It is well suited to it; the fuchsia grows there to be a tree, whereas it is only to be called a shrub in other parts of the country.

1556. Is

Dr. *Farquharson.*

1556. Is not the fact of Connemara being near the sea against planting?—No, because there are promontories jutting out into the sea; it is not contemplated that they should be planted; but there are mountain ranges in Connemara gradually inclining to be fairly high hills.

1557. The population is mostly in the immediate vicinity of the sea, is it not?—Yes, mostly in the immediate vicinity of the sea.

1558. I think you expressed the hopeful view, in the event of Connemara being planted by the Government, that it would pay?—I am perfectly convinced that it would pay eventually.

1559. Then why do not the landed proprietors take it up?—It would be very difficult to say why they do not do it now, but in the past there was no facility for getting timber away; there were no roads. Connemara was practically owned by one, Mr. Martin, and it is difficult to say (whether from pecuniary reasons or otherwise) why he did not turn his attention to planting.

1560. There is very little planting in Connemara, is there not?—Very little.

1561. The land is of very little value?—Of very little value; thousands of acres might be had for 6 *d.* an acre.

1562. Do not you think that it might be safely left to the proprietors to plant the land themselves?—I do not think they would be in a position to do it now.

1563. Do you think that it would be practicable for the Government to give loans for planting?—I have not considered that point; but I think that the Government, by some means best known to itself, should adopt some means to have Connemara planted.

1564. At any rate, the proprietors would have no objection to sell land for planting?—As far as I know the proprietors of Connemara, they would be most anxious to sell their land for planting, and the tenants themselves would, whom I very well know.

1565. Would there not be some danger of the cattle damaging the trees?—The trees would require for the first few years to be protected from every species of stock.

1566. Do you think that the planting of Connemara would improve the climate?—How far it would improve the climate I cannot say, but it would afford immense shelter, and that of itself would virtually improve the climate.

1567. Do you think the Government would derive a benefit by the sale of the timber?—They would derive immense benefit; the timber could be sent to market now, because the roads are being opened up to the country, and if this new line which is in contemplation is made I think the wood would pay very well.

1568. But we find in other places that our home-grown wood does not pay, because we cannot stand up against the competition from abroad?—In Connemara they have to go from 60 to 70 miles for their timber; the nearest market is Galway, and that is a very expensive market; they generally have to go to the inland woods for their timber.

1569. So that you do not think the question of competition would operate?—I do not think it would.

Dr. *Farquharson*—continued.

1570. You think that the advantage of planting in Connemara would be that it would afford a good ground for students to study there?—That would be one of the grounds, certainly.

1571. This Committee has been instituted for the purpose of considering whether we ought to have schools of forestry in different parts of the country; would you consider that one school of that kind would be enough, or would you want to have one in England, Scotland, and Ireland?—I think that one would not be sufficient, and that what would be suitable for England would not be suitable for Ireland; I think that there ought rather to be a school for Ireland itself.

1572. Have you considered what arrangement could be made in that direction?—I have not considered what arrangement could be made for that; whether the school should be connected with Glasnevin or any other place, but I know that Connemara would be a magnificent place for a school of forestry.

1573. What is Glasnevin?—It is an agricultural school established by the Government.

1574. You think that students might go there for a time for their theoretical instruction?—I think they might.

1575. Then they might be drafted on to Connemara to learn the work practically there?—I am doubtful upon that point; I have not made up my mind, and I would rather not answer the question, as I am not in a position to give information with that accuracy with which the Committee would like to have it.

1576. But you would consider that a school would be desirable in Connemara?—I think that would be a good plan.

1577. You would have a school there, in which the man could have a short course of theoretical study, and then go into the woods in the afternoon to learn the practical part of the work?—I think that would be very practicable.

Mr. *Fuller Maitland.*

1578. I think you told Colonel Nolan that the land you would propose to plant would be worth about 6 *d.* an acre; how is that land let now?—A great portion of the land the landlords have in their own hands, and they have it set to graziers who either live in the neighbourhood or perhaps 20 miles away.

1579. You mean they take in cattle?—Yes; or else the tenants have a permissive right to the mountain; the landlords allow the tenants to graze upon the mountain.

1580. But supposing it were proposed to take up a portion of the mountain, would there be any difficulty with the tenants in respect to it?—No; there would be portions of the land where, although under the Land Act the tenants have rights, they would be willing to give it up for planting, because they have hundreds of acres of which they can make no use.

1581. Are you sure that the tenants would make no objection?—I am certain of it, because they would benefit by having the timber that they require; it would not be like planting a deer forest to keep the cattle out.

Mr. *Egerton Hubbard.*

1582. What are the Connemara boats made of now?—They are made of wreck timber which comes ashore; but nearly all the boats which have been built there for the last two years have been made of home-grown timber, except so far as it may have been imported timber bought in the Galway market.

1583. Is that timber grown in the neighbourhood of Galway?—It is grown in the neighbourhood of Galway, and it is grown as far as Tuam, to which they go from Connemara, which is 60 miles.

1584. Does the unseasoned home-grown timber make as good timber for a boat as well-seasoned foreign timber?—It does for the planking of the boat; it makes beautiful timber.

1585. What are the lobster pots made of?—Of osiers.

1586. They are generally planted in the neighbourhood, are they not?—The osiers are planted in the country around, but not very near.

1587. Are the osiers sent to market?—Yes, they are.

1588. Do you know the price of them?—No. I do not believe that there is even half-an-acre of osiers planted in Connemara; the people have to go to the centre of the county for their willow trees.

1589. You said that the unplanted land would benefit by the planting; I think you said it would be drained?—I did.

1590. What do you mean by that?—I mean that when you plant upon the side of a mountain you must have a fall of water either to the river or to the sea. It would necessitate driving a main drain either to some inlet or outlet to the sea, and the main drain would drain the land for many acres round where the tenants would raise their stock; the cattle would have shelter there and the land would be dry.

1591. You mentioned that oak, fir, larch, and beech grew there; does the birch grow well in Connemara?—I have seen very little of it except at Ballynahinch.

1592. It is used very largely in Scotland for bobbins and other things?—Yes; it does grow in Ireland, I believe.

1593. Have you made any calculation of what the cost of planting an acre of bog would be; the rent of the land, you say, would be 6 *d.* or 1 *s.*, I think?—I have not made a calculation, but I think the cost would be comparatively little, because an acre of land could be drained at distances of 40 feet by what we call an open drain, 6 feet wide at the top and 3 feet at the bottom, and that at 4 feet deep in the deepest would cost very little to make. There is a natural fall for the water to the sea and to rivers, and it would not require up the side of the mountains more than half a foot or a few inches to drain the worst parts of the mountains.

1594. Still you think, although you have not made a calculation of the cost, that the cost would be very small?—I think in Connemara the cost would be very small.

1595. We have had evidence given before this Committee that no one can afford to pay Government the interest upon a loan for making a plantation; have you seen that evidence?—No, I have not. But there is no place in Ireland where you can get labour so cheap as in Connemara; you can get labour for 1 *s.* 3 *d.* from some of the best workmen in Ireland, and 1 *s.* 6 *d.* a day is the highest rate given by the Board of Works; 2 *s.* a day is, perhaps, the highest labour rate given in Ireland at all; so that you can get labour very cheap in Connemara.

Mr. *Egerton Hubbard*—continued.

1596. You stated that the money ought to come from the Government or from public companies; do not you think it would be better for the Government to make loans upon easy terms to the owners of the soil, as the Government do now for drainage and fisheries; would not the local knowledge of how to prepare the land be more useful than the intervention of any Government person from the outside?—I could not give an accurate reply to that question, because I consider it would be the duty of the Government to consider which would be the best plan, either to give the money or for themselves to undertake the work. I have not considered which would be best for the country.

1597. I think Colonel Nolan asked you whether Connemara would be a good place for a school of forestry?—It would be a very good place for a school.

1598. But most of Connemara is at present unplanted?—Yes.

1599. So that it would be a good school only for the formation of plantations; there are no natural woods, are there?—Yes; we have one at Ballynahinch, one at Murvey, one at Clifden Castle, and one at Oughterard.

1600. Are the woods old enough in Connemara to show young planters which woods could be advantageously planted in Connemara?—There are quite old enough woods to show that, because there have been in recent years a good many planted.

Chairman.

1601. Those that you have mentioned are the principal woodlands in Connemara, are they not?—Yes.

Mr. *Rankin.*

1602. Do the trees grow very well there?—Yes, they do.

1603. Is it not rather too near the sea for the trees to attain large growth?—No; because Connemara is such a wide district that what we consider near the sea would be 12 miles from the sea. The distances in Connemara are large; you have to go 40 miles by car to the train; we look upon that as a short distance.

Mr. *Mark Stewart.*

1604. How would you get the wood away in the event of the land being planted largely?—If the Government would not give us a railway from Connemara, it could be carried away by boat, shipped by steamers.

1605. But you are 20 miles from the sea; it is a long way to carry it?—Even so it becomes a cheap mode of getting it, and it would not be so expensive as in other parts. I think you could well afford to take it away by steamer; and, besides that, there is a very large consumption.

I do

Mr. *Mark Stewart*—continued.

I do not believe that for from 50 to 100 years to come you would have much to take away at all.

1606. I suppose, inasmuch as you have very little wood in that part of the country, you have no foresters who know anything about plantations?—No, there is no forester in Connemara; there is generally at Ballynahinch a man who knows about planting trees, but I do not know that he would be what you call a forester.

1607. Is this what you would consider a good way of employing labour?—No; any temporary relief of that kind I look upon as not good for the country. I look upon plantations as a means of giving timber to the people for the fishing trade, besides the money profit to the people afterwards, but not in the way of giving relief; that would be a secondary thing.

1608. Have you any knowledge of the trees which would be likely to grow there and thrive there?—All the trees that have been planted there have thrived well in the places they have been planted in.

1609. If it has been found to do well, why is it that more have not been planted?—I daresay you know the position of landlords in the past as well as I do. I do not know whether the landlords had much more money in days gone by than they have now, or whether they did not turn their attention to planting, but why they did not do it I could not say. There is no resident landlord at all, I might say, in Connemara; they are all living away. Even one of the largest proprietors in Connemara, Mr. Berridge, has not been in the country for six years; and before him it was the Martins of Ballynahinch, and then the Law Life Company, and I suppose they did not take much interest in planting.

1610. Have you heard much complaint that there is no planting?—Yes; I have heard complaints that wood is very scarce, and that in a few years' time there will not be any wood at all in the country.

1611. You have not heard any complaints that there is no school for teaching forestry?—I have heard it said that it would be desirable to have a branch school in which people could be instructed. It would be easy to give them a knowledge of the Austrian pine and the other pines which would flourish in the country; it would not require much knowledge at all.

Colonel *King-Harman.*

1612. Do you think there would be any difficulty in getting land for planting?—No; I believe there would be no difficulty in getting land for planting.

1613. You do not think that there would be any difficulty with the tenants?—No; even at this minute, in my parish, we could undertake to give you from 3,000 to 4,000 acres.

1614. Is that land that is suitable for planting?—You could pick the land that was suitable out of that quantity.

1615. But you do not consider that the barren land would be suitable for planting?—There is no barren land in Connemara at all, it is not a bog land; and the bog land, what there is of it, is not like the bog land outside. The granite

Colonel *King-Harman*—continued.

stones standing out here and there show that there is inorganic matter there which would serve as manure for the trees.

1616. Is there good grazing there?—There is good grazing there, but even if there were thousands of acres more they could not graze it.

1617. But as regards the people who graze their sheep and cattle upon the lands, do not you think you would have a difficulty with them? No; because the land is either in the hands of the landlords, or in the hands of tenants under the Land Act, or in the hands of graziers. Under the first state of things the landlord can give up the land without any injury to the tenant, as far as the Land Act is concerned; in the next place, where it is in the hands of a grazier, it is no loss to take it at all, because he generally lives far away from the district, so that it would be better to have the land planted; and thirdly, where it is a permissive right to the tenant thousands of acres would be given free.

1618. Do you say "given free"?—It would be given free practically when the value is only 6 *d.* an acre.

1619. In the part of Connemara which you are acquainted with the feeling, I presume, is very much the same as in other parts of Ireland; people cling very closely to the land, do they not?—If it came to be a war as to whether the tenants should be cleared out for the landlords either to shoot or fish, then it would be a difficulty; but if the land were to be planted for the good of the country the tenants would not offer the slightest obstruction; those who had the permissive right would give it up without the slightest difficulty, and there would not be the smallest inconvenience.

1620. Although, as you are aware, the tenant living there would get no benefit certainly for the next 12 or 14 years from the trees even in the way of shelter?—Yes, he would get an immediate benefit.

1621. How would that be?—Because the land that his cattle cannot now walk upon would necessarily be drained immediately; it would become pasture land for his cattle, and land that his cattle could be upon, whereas portions of it are now very marshy; that would turn out to be good land for the use of the tenant.

1622. Then your contention is that in fencing and preparing the land for planting you would drain the land outside?—You would necessarily drain the land outside; you would not go for flooding the other portion of it; it would be out of the question to do that.

Mr. *Rankin.*

1623. Does the land require a draining before it can be planted?—A good portion of it does not require draining.

Colonel *King-Harman.*

1624. Do not imagine that I am questioning you in a hostile spirit, because I am very much in favour of planting; but I want to see how a tenant could be dealt with, so that he would give up what land he possesses; we all know that he prizes it very highly; how would you take

Colonel *King-Harman*—continued.

what little grazing land he has?—In the first place, if you take the plantation itself, the tenant is benefited in a very short time by the willow trees that would grow and be suitable for lobster pots; they in two years' time would be fit for lobster pots, and those are known to be the best pots for lobster purposes. That would be an immediate benefit conferred upon the tenant, whereas he has now to go from 20 to 30 miles for the willows to make the lobster pots; and in the second place, he would have an immediate shelter for his cattle. Those are two advantages to be derived; and in the third place, there would be the land that the tenant would be deprived of. There are thousands of acres which, even if they were taken forcibly from the tenant, he would not interfere about. But apart from that, those who have had land upon the mountains have expressed the desire that certain portions of the mountain now in their possession should be planted.

1625. Do they plant osiers at all?—Very little; they are planted in a few gardens immediately adjoining their own houses.

1626. Is there much marsh land that would be suitable simply for osier beds?—The whole of Connemara, for instance, is beautifully situated for osier planting.

1627. Are there a good many crooked streams which run down through the country, on the sides of which there would be suitable spots for osier beds?—They would be very suitable.

1628. But the people do not plant them themselves?—They do not.

1629. Do you know what sort of willow they want?—It is the common salix.

Mr. *Fuller Maitland.*

1630. If tenants were deprived of a certain right of grazing, would they not think it was fair that some consideration should be made for that deprivation in regard to their lands?—If the land were what you call very dear land, and if the land were limited, they might consider that matter; but you could hardly have an idea of the Connemara land unless you saw it, because there are thousands upon thousands of acres of land as to which the tenant does not care whether it is more or whether it is not there. It is not limited to 100 or even 1,000 acres, which might be taken up from the tenants, for there are thousands of acres which might be taken from the tenants and planted upon an extensive scale, still leaving abundance of pasture land for them.

Mr. *Rankin.*

1631. Do the people desire those woods for the sake of firewood, or for the sake of timber?—They desire the woods for the timber.

1632. Does not foreign timber come in as cheaply as it possibly could be grown?—No, I do not think it does, because they have to pay for it pretty heavily in the market; and then, in the fishing industry every species of timber from the oak to the larch is made use of.

Colonel *King-Harman.*

1633. You suggested two timbers just now, one the Austrian pine and the other the oak; now the oak grows so slowly that it would not be of much use to the present generation?—I do not suppose it would be of much use to the present generation.

Colonel *King-Harman*—continued.

1634. The Austrian pine is very valueless as timber, is it not?—No more so than the common pine.

1635. Are there any larch plantations?—At Ballynahinch and at Glendallagh you have larch trees.

1636. What is the nature of the soil?—Granite.

1637. Not limestone?—No, not limestone.

Mr. *Egerton Hubbard.*

1638. What is the average size of a farm in Connemara?—It varies; some are 10 acres, some five acres, and some four acres, up to, perhaps, 15 acres; and then some farmers fairly comfortable would have, it may be, from 40 to 50 acres of land on the whole.

1639. Is the best land in the village or upon the hillside?—In the valleys near the hillside; not almost at the very peak, because the heather grows towards the top of the hills.

1640. Would the plantation run from the hillside?—From the valleys to the hillside.

1641. You would plant to keep the sea wind out, would you not?—I do not think you could plant upon the seaside, because that part is generally populated; the people occupy the seaside because they are a fishing population, and they live as near as they possibly can to the sea.

1642. I would suggest that the owner of a farm of only five acres would not like to lose any appreciable part of his five acres for the sake of planting?—No; there would be none of his five acres that he tills that would be used for planting; it would be the mountain.

Chairman.

1643. Are the woods you mentioned fairly managed?—They are very well managed.

1644. Then, as far as there are woods there is no defect in the management?—No, there is no defect in the management.

1645. Are they managed by foresters generally?—They are not managed by what we call foresters, but by a keeper or person who takes care of them together with a house, and they seem very expert; such a man very easily knows how to manage the trees, and what trees to plant, and how to plant them.

1646. If there were any amount of planting, would there be any difficulty in finding experienced persons to take charge of the planting?—No; after a short time there would be no difficulty in instructing persons to manage the woods afterwards.

1647. Do you know Mr. Mitchell Henry's plantings?—Yes, I do.

1648. To what extent do they exist?—They are for ornamental purposes rather than profitable purposes.

1649. What trees grow there?—Almost all the trees that I have mentioned grow in them; the wild oak grows there, and, in fact, every sort of tree is to be found growing there.

1650. Has he made experiments with the new coniferæ?—I could not say, not having been there for some years.

1651. Does

Chairman—continued.

1651. Does the Douglas fir grow in Connemara?—I do not know the tree by that name.

1652. The larch; does that grow there?—Yes, and fir trees grow as well there as in any other part of Ireland.

1653. I do not know whether you told the Committee the way in which the larch is disposed of at present; I suppose they dispose of the thinnings every year?—I could hardly tell you, because there is so little of it.

1654. Do they sell it by auction?—No, they generally give it to the tenants; they get it for repairing their houses or their boats; that is my experience of Connemara. I do not think they sell any of the timber.

1655. So that you could not give the Committee any information as to the disposing of the timber if it were grown?—Certainly there would be a profitable market for it; the tenants would buy it up. At present I do not know whether they buy it or whether the landlords give it to the tenants.

1656. If there were 5,000 or 6,000 acres planted, would there be an open demand for the timber?—There certainly would be. If there were 20,000 tons of timber per annum, there would be a demand for that amount in Connemara.

1657. For what purposes do the people use that timber?—For building their boats.

1658. Are the boats made of wood grown in the country; I thought you said they were made of drift wood?—They are made from wood which is grown in Connemara, and from the drift wood.

1659. Are the boats made of larch?—They use larch pine for the sheathing, and then the oak is used for the ribs of the boat, and for the masts you have the pine.

Mr. *Mark Stewart.*

1660. Does the Corsican pine grow upon that land?—No, we have only the common pine and the Austrian pine.

1661. And the Scotch fir?—The Scotch fir grows in the district.

Chairman.

1662. I suppose one of the great benefits arising from planting would be the employment and encouragement of labour amongst the industrial population; it would do a great deal of good to the country in that way, would it not?—Yes, but that should be a secondary matter; it would not be in that view at all that I would advocate it.

1663. You see no difficulty in the way of attaining a profitable result?—I do not see the least difficulty. I am convinced, on the contrary, that there would be a profitable trade in the timber, and that within 90 years.

1664. You do not think that the recent land legislation would affect the taking of land for planting?—Not in the least.

1665. Then with regard to this school of forestry, because that is our principal object, to ascertain what would be the best centre for a school of forestry if it were desired to have one in Ireland; are you acquainted at all with Glasnevin?—Very slightly indeed.

Chairman—continued.

1666. But it is an agricultural school, is it not, of some celebrity?—It is.

1667. And the pupils are kept there till they are 21 years of age; it is like an agricultural college, is it not?—I could not exactly say as to that.

1668. Do you think that there should be a school of forestry connected with Glasnevin?—I could not give an opinion upon that point; I would rather leave to the Government to select the best place for putting a school; but I do believe a school of forestry should be placed in the centre, and branches established here and there where forestry could be largely cultivated.

1669. Is there an Irish agricultural society?—I do not think there is.

Dr. *Farquharson.*

1670. Is the whole of the mountain-land in Connemara being used for some agricultural purposes now; are there sheep and cattle grazing over some portions of it?—Over considerable portions of it; over some portions there are not.

1671. I thought you said there were considerable portions which were not used at all?—It is used for what are called grazing purposes; but there are so few cattle and sheep grazing upon it that in many portions the grass is from four to five feet high; it is growing stuff which be used for thatching.

1672. The people would not feel the deprivation of the land, you say?—Certainly not.

Mr. *Biddulph.*

1673. With regard to the land which would be planted and which would be taken from the tenants, even to a very small extent, would not those tenants, when the wood was grown up, look to having a right to it in some way?—The land that we are speaking of for planting is not really in the hands of the tenants at all.

1674. But might not the tenants come some day and say that they had the right to pasture upon it?—No, they would not; if they gave up the right voluntarily they would not claim it back. But one of the questions put to me by Colonel King-Harman might have referred to a narrow tract of land immediately adjoining a tenant's holding, and this narrow strip of land is not contemplated for planting at all, but it would be the more barren tracts far removed from that which would be more suitable for planting.

1675. You think there would be no danger when the woods were grown up of the tenants claiming them for their own, in consequence of having enjoyed rights of pasturage originally over that land?—I believe there would be no danger of anything of that kind.

Mr. *Evelyn.*

1676. You stated in answer to Colonel King-Harman that most of the proprietors of Connemara were absentees?—Yes.

1677. And that once almost the whole territory belonged to the Martin family?—Yes.

1678. Now is it the case that there are a few large properties, or that there are a great many properties?—There is one large proprietor, and a few other small ones; in fact, I might say that

Mr. *Evelyn*—continued.

a-half or two-thirds of Connemara is owned by one proprietor; that is Mr. Berridge.

Colonel *King-Harman.*

1679. I think Mr. Berridge has 156,000 acres?—I think he has that at least.

Colonel *Nolan.*

1680. With regard to the tenants, I wish to set this question right: do not nearly the whole population of Connemara live upon the coast?—Yes.

1681. Either upon the islands or within 300 or 400 yards of the sea?—Yes.

1682. You do not expect to touch their land at all?—No.

1683. The tenants who lived in the country which was planted would expect to derive some benefit from the wood, either by being appointed caretakers or labourers, or by being allowed to get the wood for their carts?—Yes.

1684. And they would be very well satisfied with that?—Yes.

1685. The land is taken up already, is it not, by large farmers or by tenants near the seaside, who take from 20 to 30 acres of land?—Yes, that is the case.

1686. Those people upon the seaside know perfectly well how to balance the one thing against the other; they know that 30,000 acres taken up for planting would not have the effect of raising the rent upon them at all?—Yes, that is so; it would not increase the rent upon them.

1687. You might find one or two small farmers who would say they had a little grievance, and would claim 100 *l.* or 200 *l.* compensation if you took 20,000 acres?—One or two farmers might

Colonel *Nolan*—continued.

claim something of that kind, but those cases would be very few.

1688. You have no hope of this being done by the landlords themselves; whether they will not do it, or are incapable of doing it, it must be done by the Government?—I do not see the least chance of the landlords doing it.

1689. Would not doing it by means of the landlords mean that the landlords, being non-resident, would have to employ a staff of bailiffs and agents to look after the loans, and that would tend to increase the expense of the loan?—To that question I would not previously give an answer; but in the light in which you now put it, it would be far cheaper done by the Government directly rather than indirectly through the landlords.

1690. You have seen a good deal of the work done by the Board of Works in Connemara, have you not?—I have. The Chairman, Colonel Gaselee, has arranged to have all the works of the piers done by day labour, as being far cheaper than handing it over to the landlord.

1691. On the ground that it would be cheaper to do the work in that way than by doing it through the landlords?—Yes.

1692. Then in the same way it would be cheaper to do the planting through the Government direct than through the landlords?—Yes, in that view it would be far cheaper that it should be taken up direct by the Government.

1693. Have you seen many examples of that in the improvements and changes which have been made in Connemara?—Yes, I have.

1694. That for the want of resident proprietors in Connemara the Government must act directly? Certainly; that is my opinion.

Mr. ANDREW GILCHRIST, called in: and Examined.

Chairman.

1695. I THINK you are the head woodman to Lord Powerscourt?—Yes, I am.

1696. At Powerscourt, Enniskerry?—Yes.

1697. You have been for some time in Lord Powerscourt's service in that capacity, have you not?—I have for nearly 10 years.

1698. I suppose you have had some considerable experience in the management of woods?—I have.

1699. Would you tell the Committee where you were before you went to Powerscourt?—I was in Scotland for a number of years in the county of Kincardine and in several other counties in Scotland.

1702. You have been charged with the management of woodlands in Scotland and in England perhaps?—I know the state of the woodlands in Scotland pretty well, but not in England.

1701. You are thoroughly conversant, at all events, with the state of the woodlands in the eastern part of Ireland?—Yes.

1702. What is your opinion as to the forest management in that part of Ireland?—There are some large properties where there are some capable men in charge of woodlands, and where

Chairman—continued.

they are fairly well attended to, but on the small properties where there is not a skilled man kept I do not think they are profitably managed.

1703. Is the system much the same in Ireland as in Scotland, yearly thinnings and fellings?—Yes; where there is a trained forester kept it is very much the same.

1704. Could you give the Committee any idea in your opinion of the value of the woods and plantations as contributing to the agricultural improvement of the country?—I could not give you any idea as to the value of them to the country as a whole.

1705. To what extent have the woods contributed to the agricultural improvement of the country?—I have known the rental of a farm being improved fully 25 per cent. by plantations being planted for shelter.

1706. Do you consider that there is an actual loss to the country from the want of care and judicious management in that respect?—Yes, in many parts there is an absolute loss to the country.

1707. Do you think that judicious planting improves the value of the property by giving shelter?

Chairman—continued.

shelter?—It improves the value of the property a great deal by giving shelter.

1708. Does it have an effect upon the soil and climate?—The soil has been very much improved and also the climate, and there is great shelter derived from planting, both for crops and stock.

1709. Do you think it would pay farmers well to plant?—Yes, I think it would. I have known cases in which farmers have planted shelter for stock upon their farms, and have continued to pay rent for the land for 20 years which they had planted in order to have the benefits of the shelter, and they found that it paid them well. I know one of those farms upon which one of the farmers previously to having planted his land for shelter had to stock his land twice for want of shelter; the animals died in winter from the cold.

1710. Do you think that the planting of Ireland would affect the condition of Ireland?—I think that the late Land Act would have a great effect in keeping back landlords from planting.

1711. But not tenants?—No, not tenants.

1712. Your opinion is that a tenant might profitably plant?—My opinion is that a tenant might very profitably plant.

1713. Would you give the Committee briefly some description of the planting operations at Powerscourt under your system?—The last plantations formed at Powerscourt were nearly 1,000 Irish acres of larch for the most part, but mixed with Scotch fir, spruce, *pinus laricio*, Austrian pine, and Douglas pine; in fact, a great many of the newer conifers have been tried there, and as a rule they are all doing pretty well.

1714. Do you have annual thinnings of the underwood?—We are carrying out a system of thinning a portion annually.

1715. Do you find a profitable mode of disposing of the thinnings?—We sell the thinnings very well; the larch thinnings we can sell very well.

1716. With regard to larch timber, do you find what you call a sale for it?—The larch and the Scotch fir timber is mostly shipped from Wicklow to Liverpool, and then sent to the colliery districts in Lancashire.

1717. Have you anything to complain of as regards the preferential rates for the timber that you sent away?—The railway rates I think are a little high for the haulage of the timber from inland to the coast.

1718. Do you think that your timber suffers by the preference that is given by the railways to foreign timber over English and Irish timber?—I do; I think the timber trade in Ireland suffers very considerably from that; and although I am not able to give the exact figures, yet I believe foreign timber is brought into Ireland cheaper than our home timber is taken out of it, much cheaper.

1719. Could you give the Committee briefly any details of the cost of making a new plantation in your part of Ireland, including fencing, draining, and holing?—We have not had a great deal of draining; I daresay 1 *l.* an acre would cover all the draining we have had to do.

1720. You have not much bog land, have you?—We have not much bog land; the planting has been mostly done on the hill sides where there is a natural drainage.

Chairman—continued.

1721. What do you consider it costs per acre for fencing, holing, and planting altogether?—The planting has been costing in Ireland upon the average 4 *l.* an acre, but I consider it could be done more cheaply; I consider it could be very well done for 3 *l.* an acre exclusive of another 1 *l.* for fencing.

1722. Is yours T planting?—It is notch planting, or it may be L.

1723. What does the fencing cost per acre?—I should say you could get very little idea of that, because if you fence a narrow belt the fencing that would do that would probably do 500 or 600 acres; if you planted a larger area you would have a very much less proportionate cost for fencing.

1724. But per yard what would it cost?—It would cost from 8 *d.* to 1 *s.* a yard; you could put up a very fair fence for that money.

1725. Taking a rough estimate, what do you consider generally the cost of planting per acre?—From 6 *l.* to 8 *l.*; I consider the latter figure would be very expensive; I should say about 6 *l.* would be ample; a larger extent would cost a very great deal less.

1726. What do you consider would be the value per acre of plantations planted 10 years ago?—I have a note of a plantation planted by Lord Powerscourt 40 years ago.

1727. What do you consider to be the value of that per acre?—This is a net estimate of what I would get for the timber if I were to lay it down on the pier at Wicklow; I would get 41 *l.* 10 *s.* per imperial acre. Then, taking a plantation planted rather under 25 years ago, its present value would be 25 *l.* In 1885 I took out of that plantation 13 *l.* 2 *s.* 6 *d.* an acre for thinnings, and in 1879 I took 10 *l.* worth an acre out of it.

1728. And what was the original value of the land per acre?—A very fair value for that land would be 25 *s.* per Irish acre; I should say about 15 *s.* per imperial acre.

Colonel *King-Harman.*

1729. Are all your figures based upon Irish acres?—No, they are based upon imperial acres.

Chairman.

1730. Are those trees of 25 years' growth?—Yes.

1731. How many tons per acre do you estimate you can grow in larch of 25 years' growth?—I have not the result made out in tons, but I could soon do it. Then there is another plantation in the deer park at Powerscourt planted 40 to 45 years ago, you may say roughly.

1732. Then you would say that you consider that you are growing larch profitably?—I do consider that I am growing larch profitably even with the reduced price.

1733. Now with regard to hard wood, what hard wood do you grow?—We have very good ash and oak; almost all sorts of hard wood grow very well with us: but I do not think it would be profitable to grow hard wood in large quantities for the benefit of the country.

1734. You would get a certain sale for that?—There

Chairman—continued.

—There would be a certain sale for that, but you would have to wait a considerable time before you got an income from it, and you would have to plant it upon the better-class soils.

1735. You would use some of the wood for clogs, would you not?—We cleared about 55 *l.* worth of alder per imperial acre, and that is made into clogs for Lancashire; it was sold at alder 4 *d.* per cube foot.

1736. How many cube feet would make a ton? —Thirty-five you may say. The fair value for is 10 *s.* a ton upon the ground.

1737. Now with regard to the establishment of a forest school, have you read the evidence that was sent to you, and will you give us your opinions upon the question?—I think that schools of forestry are wanted somewhere in the three kingdoms.

1738. Where do you consider would be the best centre for one in Ireland?—I do not think that one school would be sufficient for Ireland; neither do I think that one school would be sufficient for Scotland.

1739. But suppose we begin with one?—I think it would be a mistake even if you began with one, because, for instance, if you take Edinburgh, I do not see what benefit foresters would get from a forestry school in Edinburgh; I fail to see that they would get a benefit equal to the money that would be expended upon the school by the Government.

1740. The idea is that foresters might obtain a certain amount of practical instruction in woods, and then go to Edinburgh or some other centre for the more scientific teaching if that were desirable?—I have a very strong opinion with regard to the scientific instruction that a forester requires. It would have been of great advantage to the country if there had been more of it years ago; but I think in Scotland, if the board schools were taken advantage of, sufficient scientific knowledge could be taught to the foresters in Scotland, not only to enable them to practice pretty well and successfully in the country, but they might also be taught in those board schools very nearly sufficient to equip them to be sent to India for the Indian forests.

1741. But in the board schools they are children almost, and with the large number of different subjects they are required to learn in the board schools, how could they learn forestry as well?—It would be taught as a special subject, just as in the board schools in Scotland they are teaching domestic economy and many other subjects. You may often find schoolmasters who can teach geometry and extra subjects, and get passes for their pupils.

1742. I am afraid we shall be told by our medical friends that the board schools are teaching the children a little too much for their brains already without giving them anything more?—I do not mean to say that it could be pressed into their heads while at the school; but I mean to say that the want might be met if you had in three or four districts of the country what I would call a sort of educational estate, where you had a large quantity of plantation of various ages, and various kinds of timber, and where you had a large variety of soil and climate. If these young men, when they came to the length of being able to work, were employed upon an estate of that kind, and were taught during the evenings (they need not be taught during the whole of their time, but they might be taught by board schoolmasters during part of their time), they would soon gain the requisite knowledge.

Chairman—continued.

1743. But the evidence which the Committee have had is that there is not that amount of employment to be obtained to afford occupation for those instructed in forestry; for those actively employed as practical men it would appear that a much more limited scale of instruction would be all that was necessary, would it not?—If you establish a forest school in Edinburgh, and if a young man had to come up to Edinburgh to get a scientific knowledge, there would be considerable expense attached to that.

1774. He would get that repaid by the subsequent remuneration he would be able to obtain? —But you must look at the time he would have to spend upon it; whereas he would, under my suggestion, be learning the practical work, which is the most important part of the thing, and he could get his scientific training at the very door where he was getting his practical work.

1745. It has been suggested that in Edinburgh, Dublin, and London, there might be some scientific body who might grant certificates or diplomas for forestry instruction; there must be some centre for that; what centre would you suggest in Ireland for that purpose; do you know anything about the school at Glasnevin?—I do, but I do not think that is sufficient to afford practical information.

1746. Is there any society in Dublin which takes cognisance of woodland management, silioiculture, or arboriculture?—I do not think so, unless it be the Royal Dublin Society.

1747. What is that?—It is a scientific and agricultural society, and agricultural shows are annually held in connection with it.

1748. Could a system of giving diplomas be associated with that society?—Yes, it could, I think. I think they grant some diplomas now in agriculture.

1749. But not in forestry?—No, not in forestry.

1750. Would it not be a good thing that that society should take up the question of forestry? I think it would be a much better thing that the Government should take it up entirely.

1751. If the Government are not disposed to take it up entirely, would not the Government be more inclined to do something if the societies took it up?—I believe there is a great deal in that; the Government might be more inclined to take up forestry if the societies took it up.

1752. You are not very hopeful of anything being done in the way of forestry instruction in Ireland unless it be done on the large scale that you suggest?—I think the best plan would be to take advantage of a large estate in the neighbourhood, say, of Dublin, where the pupils could go and get practical experience. My experience of forest schools would be such that they would not be likely to bring up men who could carry on the forests of the country; the danger would be raising

Chairman—continued.

raising a man partly above his work; not that I would like to see their education neglected; I would rather, on the other hand, see it very much improved; but I think their improvement in education must be associated, to a very large extent, with practical work.

Dr. *Farquharson.*

1753. Are Lord Powerscourt's plantations very large in extent?—We have, I daresay, a little over 4,000 acres.

1754. Then, of course, it is partly with the view to ornamentation and partly with the view of commerce that he plants?—Yes; it is chiefly for profit, latterly, that he has been planting, because it is in a part of the country a good distance away from his house; it is not exactly round his demesne.

1755. Do you think, on the whole, the plantations in Ireland, as elsewhere, are not very profitably managed?—Yes, many of them are not very profitably managed.

1756. What particular point do you think they fail in?—They fail in want of attention as to thinning. I have seen a great many losses occur through a want of attention to drainage; that is to say, the drains have been opened when the plantations were formed, and have been allowed to become filled with stagnant water for want of cleaning.

1757. That, of course, is due to an imperfect knowledge on the part of those who superintended the planting?—Quite so.

1758. And that would point to the desirability of affording some better opportunity of practical instruction to those men who have to superintend the forests?—Yes, that is my idea in advocating the more practical course of education.

1759. You consider your own forests have been profitably worked?—I think they have been profitably worked.

1760. That is, I suppose, that you have a large quantity of larch, which can always hold its own against foreign timber?—Yes, no doubt it is due to that; and also there was a considerable quantity of hard wood that had been planted, probably about from 80 to 100 years ago, and we have been realising a lot of that by judicious thinning; not by clearance.

1761. Do you think that your plantations in the future are likely to be as successful profitably as they have been in the past?—I think so.

1762. Why should your experience have been more favourable than that of other countries; the Committee had Mr. Dundas from Scotland the other day, who told them that they could not grow timber profitably in any part of Scotland?—I think the depression in the price will not last. I think that was owing to the great quantity of timber that was blown over by the recent gales, a large quantity of which is still unsold.

1763. Is it not due to foreign competition too?—Yes; it is due to foreign competition, no doubt, but that cannot go on for ever. For instance, as regards these Norway spars, although brought in for next to nothing, they could not go on bringing them in at that price, and as they cut further from the coast the price will have to go up.

Dr. *Farquharson*—continued.

1764. Is it not the fact that, if you are building a farmhouse or a cottage, you can get your doors and windows sent over ready-made from the Continent cheaper than you can make them yourselves?—Yes, for those foreign battens, and so on. I do not think there has been any great effort on the part of home growers to compete with them; they are rather more inclined to sell their wood in the rough.

1765. Is it not a fact that iron is being used very largely instead of wood?—Yes, I believe it is, for fencing.

1766. And for coal props and for railway sleepers?—Yes, for railway sleepers too.

1767. Then that does away with a great deal of your opportunity of selling thinnings?—It does away with a great deal of the opportunity of selling small thinnings; but when you have thinnings large enough for colliery purposes, I think you could sell almost any quantity of larch.

1768. You are very fortunate in being able to grow larch so well; we find in Scotland that the larch becomes very quickly diseased; I do not know whether it is due to soil or not, but have you found any inferiority in the larch now over what you grew before in the way of health?—No; I think the Irish larch is quite as good as the Scotch larch was, and even freer, if anything, from disease.

1769. You find no deterioration of late years?—No.

1770. Why is it that the Irish Land Act interferes with landlords planting?—They would have to buy up the tenant-right.

1771. Does the tenant-right extend to waste places upon the hills?—Many of the tenants have rented the arable land at the foot of the hills, and then they have grazing rights on the top of the hills, which may not be fenced off, but which two or three of them may hold in common, and they would have to be settled with.

1772. You have said that the planting of the future would be done very largely by the tenants, but that would be only upon a small scale?—They would plant just corners and belts for shelter.

1773. That would not be for commercial planting; it would be only upon a small scale, just dotted about here and there, in small patches?—Yes.

1774. It would have no influence upon the general stock?—No; but what I want to convey is, that if a tenant chose to enter into it, it would pay even then to plant belts of larch upon the farms.

1775. I think you expressed the opinion, which I must say I quite agree with, that there would be a great difficulty in sending young foresters to a school at Edinburgh, as the expense would be too great?—The expense would be too great, and, besides that, you have neither scope nor material for their education there. Although you may get 80 acres near by, in the botanic gardens, I do not think that is a field for teaching forestry; it is more like a thing for training up a gardener.

1776. You think the idea is that they would go to Edinburgh, and they would get an idea of

Dr. *Farquharson*—continued.

botany and agriculture, and from there be drafted away to a forest for practical work; would that, in your opinion, be rather an expensive and cumbrous proceeding?—I think it would be rather expensive and cumbrous.

1777. Then you say you think the board schools might be utilised?—I only mentioned the board school for the elementary part of the instruction, and when the pupils are more advanced for them to do practical work.

1778. Continuing their studies under a board schoolmaster, either at night or for a month or two at a time, and that would be purely as an extra subject?—Exactly so.

1779. Then the difficulty suggested by the honourable Chairman, that it might lead to a little over-pressure upon the part of the children, would be met by an extension of the course; the pupil might stay there another year for the purpose of studying forestry?—Yes. It would be very easy to compile a few text-books explaining the practical operations of planting and pruning, which could be easily illustrated by woodcuts, which would interest the children at a very early age.

1780. You think a schoolmaster could teach that?—Yes, I think a schoolmaster could teach it. In Ireland the schoolmasters are teaching agriculture, and get result fees from it. I do not see what advantage you would get from a forester, although you may make sure that he has a greater amount of scientific knowledge, if he has not practical skill to carry him through along with it. I think it would be doing injury to the landlords who employed them afterwards, because now-a-days, with all this competition, the thing must be worked very economically to make it pay, and unless a man were skilled in the every-day work of the forest he would only be a second-class forester.

1781. The great difficulty in agriculture is the disinclination to take it up as a practical study; would the same thing apply to forestry, do you think?—I do not think so. Speaking of Scotland, I think the young men would be rather anxious to be encouraged to get a scientific training; but I doubt very much whether a young man from Aberdeen or Inverness would be inclined to come to Edinburgh for two or three months' study, for all the extra scientific knowledge he could get there, as compared with what he could get in Aberdeen or Inverness.

1782. Is not one disadvantage of teaching forestry subjects in board schools, that you would be teaching children very young, who had not made up their minds what their future course of life was to be, so that by the time they came to be foresters all this instruction would be forgotten?—I would not make it compulsory to learn forestry; but supposing one or two of those who had been taught in board schools were inclined to become foresters, I do not think they would readily forget what they had learned in their youth; I think they would retain it for a very long time, and that at the same time it would be very useful to them.

1783. Do you think it would be desirable that the Government should buy up large tracts in Ireland for the purpose of planting?—I think that it would be very desirable; Ireland wants planting very much.

1784. Have you any opinion as to whether it would be the better plan to do this by Government purchase, or by the Government lending proprietors money upon easy terms?—I think the planting would be very much better done by Government purchase.

Chairman.

1785. I daresay you are aware of a very nice text-book called "The Irish Agricultural Textbook," used in Irish schools?—I have seen the book.

1786. Could not a section on forestry be added to that book?—Certainly.

1787. That book is illustrated as to agricultural operations, and it might give illustrations in forestry, and that would be a very useful book to introduce in England?—It would be a very useful book to introduce both in England and in Scotland.

1788. We have no such book in our schools; but in the elementary schools in Ireland, I am told, it is largely used?—It is.

1789. A section on forestry might be added to that book?—Yes.

1790. And that might be made use of in board schools?—Yes; you might have it in two sections if you liked; one more advanced for the more advanced pupils, and one for the younger children.

Mr. *Evelyn.*

1791. I think I understood you to say that you thought tenants might plant with a profit?—I said I thought tenants might plant with a profit; and when I said that I referred to tenants who felt that shelter would be of advantage to their farms. In Ireland, you know, you plant trees and register them, and although those trees may live on the farm for more than 50 years after the death of the persons who planted them, they are still their property.

1792. It would be only tenants with long leases, I suppose, who could expect that benefit?—Every tenant under the Land Act could do it.

1793. You spoke of the *pinus laricio*; that is the same pine as we sometimes call the Corsican pine?—It is.

1794. What trees do you think the tenants could most profitably plant?—Larch and Scotch fir.

1795. Not oak?—No; I think oak would hardly be a tenant's tree; it would be too long before it would pay him.

Dr. *Farquharson.*

1796. Suppose a forestry school were started in Dublin, do you think, with the permission of Lord Powerscourt, that you could throw open your woods to the young men?—I have Lord Powerscourt in my eye, I may say, as being a very fit nobleman to carry that thing on, because, of all the noblemen and gentlemen I have met with, I never met with a more practical one than Lord Powerscourt. He is very much interested in the management of his woods, and does himself

Dr. *Farquharson*—continued.

self render a great deal of assistance in their systematic thinning.

1797. Do you think that he would be inclined to afford facilities for the studies?—I have never talked the matter over with Lord Powerscourt; but I have no doubt he would. I had Lord Powerscourt's estate in my eye, as being a very good educational centre for the pupils of Leinster, and there is also a very large property in Ulster belonging to the Duke of Abercorn; he has very extensive plantations, and pupils could study there well.

1798. And you think you could found a school of forestry there upon a small scale?—You could found such a school of forestry, say, on the Duke of Abercorn's, or some other similar property.

1799. I suppose you have, practically, a small school at Powerscourt now; you train all your own assistants, do you not?—All our own woodmen belong to the place; and although many of them have not much scientific knowledge, still I must say that they are expert woodmen.

Mr. *Egerton Hubbard.*

1800. May I ask you how old is the oldest timber you have felled upon Lord Powerscourt's property?—We have felled some over 100 years old.

1801. Do you use the timber up upon Lord Powerscourt's estate, or do you sell it?—We use a lot of it upon Lord Powerscourt's estate. We have two saw-mills. On one part of the property we have a saw-mill working regularly making fencing material, hurdles, roofing timber, and all sorts of timber for estate purposes, and that is sold.

1802. Do you use any foreign timber for estate purposes?—Yes, we do use foreign timber upon new buildings.

1803. The Committee have had evidence from one of the big proprietors in Scotland that he never uses his own timber; that he sells his own, and always buys foreign timber; is that Lord Powerscourt's experience?—It is very much his experience; for new buildings he uses foreign timber; but I myself, when in Scotland, have sold home-grown timber to timber merchants, and got more for it than I paid for foreign timber from them. That is to say, I bought certain roofing boards to build a farmhouse, and I sold spruce to the merchant, and got more per cube foot for it than I paid for the foreign timber. Instances of that kind have occurred, but I daresay they are few.

1804. Then your experience, at any rate in Scotland, was that the foreign timber was cheaper than home-grown timber?—Yes.

1805. Is it as good?—I do not think it is. One thing, however, in regard to foreign timber is that it comes by ship, and it is, perhaps, floated down the river in rafts, so that it is seasoned before it arrives, and a dip in the salt water does not do it any harm in regard to improving its lasting qualities. If the home-grown timber were properly seasoned, and allowed to lie a good while before it was used, and only really matured trees cut up into timber for roofing and other purposes, I think it would be equal or superior

Mr. *Egerton Hubbard*—continued.

to many pieces of foreign timber that I see being used in buildings.

1806. Were any of Lord Powerscourt's plantations made with money borrowed from any society?—I do not think so; they were all done by himself.

1807. Have you any experience of plantations made with money so borrowed?—No, I have not.

1808. You cannot tell the Committee within your knowledge that a plantation can be made to pay which had to pay interest for the money?—I think, if the interest was not too high, a plantation would pay interest well.

1809. But you have no personal knowledge of that?—I have had no experience of it.

Mr. *Rankin.*

1810. Have you any knowledge of the history of timber in Ireland; used there to be extensive forests in times gone by in Ireland?—I believe so, but I have never studied that question very much beyond seeing the bog oak and other trees in those bogs, showing that there had been a very great deal of it.

1811. You do not know, I suppose, when those forests disappeared?—I do not know that.

1812. Is it your opinion that timber will grow well in Ireland?—My opinion is that timber will grow well in Ireland, and grow more rapidly than it will grow in Scotland.

1813. In the west of Ireland, in Connemara, for instance, is the wind not detrimental to the growth of timber?—I have never been to Connemara; but I should not think that upon the west coast of Ireland, if suitable trees were planted, the wind would do them any harm; they would live, I think, even upon the coast.

1814. Would you recommend that the State should undertake the planting of timber in Ireland as a commercial undertaking, or as a political undertaking?—I think I could safely recommend the State to undertake it as a commercial undertaking.

1815. Did I understand you to say just now that upon some land that you had, after 25 years of growth, the larch made a return of 25 *l.* per acre?—I will give you the alder first. The value of the land in this case was about 10 *s.* per acre, and the crop of alder cleared after 50 years' growth yielded 3,300 cubic feet, equal to 55 *l.*, and there was a fair crop of trees still left upon the ground; that was in 1883. Then, coming to the larch, we have larch of 80 years' growth, the present value of which is 80 *l.* I have no account of the thinnings out of that plantation.

1816. I think I heard you say that from a 25 years' growth of larch you had a crop valued at 25 *l.* per acre?—Yes, and where they are about 50 years planted, we have 140 trees to the acre, worth 3 *s.* 6 *d.* each, bringing 24 *l.* 10 *s.* per acre. In this present year we thinned out 100 trees and sold them for 3 *s.* each, making 16 *l.* 10 *s.* realised for thinnings this year. In 1879 I thinned out of that same acre of land 100 trees and sold them at 1 *s.* 6 *d.* each, making 7 *l.* 10 *s.*

1817. What was the rental of the land?—The rental of the land would be a very high rent at 10 *s.* per acre. I consider that at the very outside 7 *s.* 6 *d.* would be ample for that. Then,

Mr. *Rankin*—continued.

coming down to the larch, 25 years planted, at the present time there are 250 trees on an acre of ground, 25 *l.* value; that was thinned in 1885. There were 150 trees taken out, which yielded 13 *l.* 2 *s.* 6 *d.* per acre. Thinned out in 1879 it yielded 200 trees at 1 *s.*; that is 10 *l.*

1818. What rental would that land be?—That is rather a better class of land. I should think it might be worth, for an agricultural tenant, 1 *l.* or so per acre.

1819. Taking it as worth 1 *l.* an acre, in 25 years that would be 25 *l.*; therefore, apparently the value of that wood upon your acre after 25 years is not more than the accumulated rentals during 25 years; I am not going into thinnings now?—I do not know what rent that land would yield before it was planted; I am only guessing it at 20 *s.* per acre.

1820. What I wished to ask you really upon the matter is this, that in a calculation of that sort must you not take into account the interest upon the rentals upon successive years to come to a true account?—You must take into account the interest upon the rentals in successive years.

1821. Therefore the loss upon the rental, and the interest upon the rental during 25 years, would be very much greater than 25*l.*?—That would be so.

1822. That is a matter of absolute figures; now I want to go to your suggestion as to the school boards giving instruction in these matters. An honourable Member suggested that if school boards taught this subject to the children it would probably be forgotten before they came to be practical foresters; is not that a very likely supposition?—I do not think so.

1823. Do you think that children of 13 or 14 years of age would carry in their minds a scientific instruction, necessarily of a superficial nature, for six or seven years?—I do for children at, say, 12 to 14 years of age. In many parts of Scotland they are engaged in planting operations, in carrying plants to the planters, at that age. These are the lads that would one day come to be the foresters of the country. If they had a rudimentary knowledge of planting at the school, I think it would very likely create a taste for further knowledge, and I think those are the men that the country will have to look to for practical foresters.

1824. Do not you think that the same object would be attained more efficiently through night schools?—Night schools would come into value when the lads have come into the practical working of the forest, when they come to be between 15 and 20 years of age, and were earning a great part of their own living.

1825. Then you would have no objection to suggesting that night schools, which taught forestry as a special subject, might have a grant from the State?—That is what I look to. The State giving a grant of that kind to various parts of the country would find it very much cheaper than if they sent the pupils to Dublin, or to Edinburgh, paying their fee and their keep. I think they would get very little by that.

1826. Do you think that competent teachers would be found to teach in the night schools?—The Irish board schoolmasters, I think, teach

Mr. *Rankin*—continued.

almost all that would be required for the scientific education of a forester at the present time.

1827. I presume that your remarks apply to foresters, and not to agents or managers of forests?—By managers of forests, I mean lads or young men who would come to be trained to be managers of forests at home, and would receive an opportunity of going out as foresters to India if they could pass the examination.

1828. Then your observations extend beyond the working forester?—Of course, as regards the working forester, if he meant to remain a working forester all his days, do not let him bother his head about science; but if he wants to improve his position, and become a really scientific and practical forester, let him take advantage of that scientific education.

1829. Then, I gather that it is your opinion that properly-arranged teaching in night or day schools is sufficient for this matter, and would be very much cheaper than in a large college?—Yes; I think it would be very much cheaper, and that you would turn out far better foresters in that way. The subjects that are taught in the Irish national schools are agriculture, organic chemistry, nature of bodies, botany, formation of plants and vegetables, geology, classes of rocks and modes of formation of the same; coal, its nature and origin. I think there is as much taught there as would be sufficient for any forester. That information was given me by a national schoolmaster.

Colonel *King-Harman.*

1830. What school did you acquire that information from?—From the national school at Enniskerry.

Mr. *Mark Stewart.*

1831. Do you consider that the feeling of the people would be generally in favour of such extensive planting as the last witness suggested; in Connemara, for example?—I do not know the feeling of the people in Connemara particularly; but I think the feeling in Ireland generally would be very much in favour of more extensive planting.

1832. Have you ever heard of any instances of plantations being burnt down?—I have not heard of plantations being burnt down maliciously.

1833. You do not know enough upon that point to say whether compensation is paid by the ratepayers for plantations burnt down maliciously?—I suppose that compensation would be put upon the ratepayers if it could be proved that they were burnt maliciously; but I do not know that Ireland is worse in that respect than any other country; in Scotland upon many occasions there has been a forest burnt down by accident.

1834. But not maliciously?—No, not maliciously.

1835. Would you be surprised to hear that upon a recent occasion it was decided that there was no compensation to be obtained for a plantation maliciously burnt down?—I would not be surprised to hear it.

1836. Do you think that compensation ought to be given for a plantation maliciously burnt down?—I think so.

Mr. *Mark Stewart*—continued.

1837. Do you know anything about the *pinus laricio*?—We have thousands of them at Powerscourt, but I do not think it is any improvement upon the Scotch fir; in fact, it is an inferior tree to the Scotch fir.

1838. It is of more rapid growth?—Yes, but I think you have a finer tree in the Scotch fir for all commercial purposes; it is not so coarse and heavy.

1839. I suppose you have some experience in game; game do not destroy the *laricio* so much as they do the Scotch fir?—I daresay they do not destroy it so much; but I think it is a fallacy to suppose that rabbits do not eat the *laricio*, because I have seen many thousands of them destroyed. I think it is a nurseryman's cry that they do not eat the *laricio*.

1840. Do you think it would be a commercial success for the State to undertake the planting of trees in Ireland?—I think it would be a commercial success.

1841. Have you ever thought out the idea as to what details or arrangement could be made to make it a success?—I do not think you would have very much expense with reference to supervision; I think one skilled man could supervise 5,000 or 6,000 acres if they were planted.

1842. Do you mean in different countries?—One superior man could lay out the plantations and start the work; I think the average Irish labourer is in no way inferior to the Scotch labourer; he will pick up anything in the way of planting as quickly as the other and do it well.

1843. Do you think the country is well adapted for such an undertaking?—The climate and the soil are both well suited for the growth of the larch and Scotch fir and any forest tree.

1844. Would they grow in the bogs well?—If they are bogs resting upon a granite formation, the larch would grow extremely well.

Colonel *King-Harman.*

1845. What formation of rock is there in Powerscourt?—It is chiefly granite.

1846. Do you know anything about the geological formation of Ireland generally?—I do not know much about it.

1847. You have given evidence that the soil of Ireland is peculiarly adapted to the growth of larch; are you aware that the soil of seven-eighths of the country is limestone?—But I do not think it is true that larch does not thrive upon limestone.

1848. Are you not aware that neither larch nor any other member of the fir tribe will grow upon limestone for more than from 35 to 40 years?—There may be many instances in which it will not grow for more than 35 to 40 years, but I do not think that is necessarily true generally.

1849. I can give you an instance of that from my own knowledge?—Even supposing it did cease to live at 35 years of age, I think that the value of larch or Scotch fir might be more profitably realised at 35 years of age than if it were allowed to grow till it was 80 years of age.

1850. At what age do you think larch would be suitable for sleepers?—I have seen larch quite suitable for sleepers at 35 years of age.

Mr. *Mark Stewart.*

1851. But 70 years would be nearer the mark, would it not?—It depends upon how they are managed. You would not get sleepers out of a wood which had been allowed to grow up without thinning like a lot of maypoles; you would not get many even if you allowed them to grow for 100 years; but if you adopted the systematic thinning, you would have good poles at the earlier age.

Colonel *King-Harman.*

1852. Have you visited many large plantations in Ireland?—I visited the Duke of Abercorn's plantations a year ago, and I reported upon them.

1853. Do you think they have been systematically and properly thinned?—No.

1854. Would you say that the Scotch fir at Baronscourt would fetch a good price at 35 years' growth?—The Scotch fir at Baronscourt would fetch a price by the way the market is going.

1855. What price do you put it at?—Three shillings and sixpence per ton.

1856. Three half-pence a cubic foot; would you call that a profitable price?—I do not say that it is a profitable price, but I think a more profitable price could have been got for it, if it had been properly managed.

1857. What do you get for it at Powerscourt?—Sometimes 3 *s.* 6 *d.* to 4 *s.*; but we take pretty good care not to cut down much Scotch fir, only those that we require to cut down for the purpose of thinning. But I have every reason to believe that in a few years the price will be better for timber.

1858. What reason have you for thinking so?—Because there has been such a large quantity of timber blown down of late years by the gales, and that is not all sold yet.

1859. Do not you know that before the gales Scotch fir timber was almost unsaleable in Ireland?—I do not think that mining timber was so unsaleable before the storms as it is now.

1860. But simultaneously with those great storms, are you not aware that there has been a very great change in the pit wood that has been sent in from Norway, that they send in their pit wood cut in lengths in a manner in which our market does not supply it, and that they have cut us out of the market for pit wood?—Yes, I know they have sent it in in that way, and that has injured our market.

1861. Would you be surprised to hear that previous to these storms I was unable to sell the very best Scotch fir timber for any purpose, except for making boxes and things of that sort?—No doubt; but there are two ways of selling timber. If you have a very large quantity of timber to sell you will get a very much better price for it than if you have only a middling quantity, because a man will come and set up a saw-mill in the neighbourhood if the quantity makes it worth his while.

1862. You would continue to plant Scotch fir, would you?—Yes, I would continue to plant Scotch fir, but not so much as it has been planted. I would plant it upon the outside and exposed parts, and even if you reaped your

Colonel *King-Harman*—continued.

crop, I would still retain those trees upon the outside and in exposed places, and plant again.

1863. Do you use sycamore for shelter?—Yes; I believe it resists wind better than any tree we have.

1864. Are you planting ash?—We are not planting a great deal of ash.

1865. With regard to the teaching in Irish national schools as to which you got information from Enniskerry, do you believe it is within the usual routine of Irish national schools that they teach agriculture to a great extent?—No.

1866. Have you never heard of any instances of plantations being burned down maliciously of late years?—I have heard that they have been suspected to have been burned maliciously, but I do not think there will be much more risk of that; times will get better.

Sir *John Lubbock.*

1867. There is very great probability, is there not, that the foreign supplies of timber will fall off in course of time?—I expect they will fall off.

1868. The Committee have had some evidence that the Canadian and Scandinavian forests have been a good deal thinned of late, and that the supply from those sources is likely to fall off in the future; do you concur in that opinion?—I do concur in that opinion.

1869. That would be partly the basis upon which you have founded your opinion that the market is likely to improve?—Yes; I think in Norway, when they cut a little further from the coast and have to pay increased carriage to the ship, the price will go up a little.

Colonel *King-Harman.*

1870. Your planting on Lord Powerscourt's property is upon the hill sides up to a certain height?—Yes.

1871. Beyond that there is grouse mountain, is there not?—Yes.

1872. Would that ever pay for planting?—The table land would pay, not the extreme tops.

1873. What height would you put that above the sea?—I should say 1,000 feet.

1874. As a matter of fact, have you planted any at that height?—I could not tell at all the height that we have planted to.

1875. Are you planting now?—No, we are not.

1876. May I ask why you discontinued planting?—I believe it was chiefly because arrangements would have had to be made with the tenants. I do not think his Lordship has any more land of his own that could be planted.

1877. You refer to planting upon the grouse mountain?—Yes.

1878. And his Lordship anticipates difficulties with his tenants?—I do not think he could buy it back after the late Land Act; it would be at all events very expensive.

Sir *John Lubbock.*

1879. You have expressed the opinion that instruction with regard to forestry of a valuable character might be given in the board schools throughout the country?—Yes, I have.

1880. But you would consider it advisable, I understand, that instruction of a higher and more

Sir *John Lubbock*—continued.

advanced character should be given at an age after the boys leave the board schools?—The more advanced education would be got at the night school; that is for men who will ultimately become foresters in this country.

1881. But would it not be desirable to collect from different parts of the country those who would be likely to be engaged in this subject, because you could not expect to carry the night schools very far; even in the whole country you could not expect to have a very large number who would require that information, and therefore would it not be better to have fewer schools in which that instruction should be specially given?—It was suggested, taking Ireland, that there might be one school in each province.

1882. Do you think that there would be a sufficient number of students to make it desirable to have more than one school in Ireland?—I do not say that it would, but if you establish a school in connection with Glasnevin and you bring them there, you would have no knowledge to give them beyond theoretical knowledge; you can get no woodland to practise upon there.

1883. And you would consider it necessary, would you not, that any properly equipped school of forestry should have an area of woodland connected with it, so that the students should see the actual processes of forestry in operation?—I think that would be absolutely necessary for the training of a really good forester.

1884. Would it be possible in some way to connect a tract of woodland with the Glasnevin school for the purpose of forestry instruction?—I thought that at Powerscourt, where there is a considerable area of woodland, the students might be taken in to study the practical part; that is to say, using the board schools as night schools and using these educational estates, as I have called them, for practical instruction. The Duke of Abercorn's estate in Ulster, for example, where there is a large area of timber, would give a large amount of practical instruction to these students. I am contemplating three or four such estates scattered over the country, and then the board schools to give them the scientific part of the education.

1885. Has your attention been called to the suggestions which were made to the Committee which sat upon Forestry last year by Colonel Pearson?—I have looked at the evidence.

1886. May I ask how far you concur in the evidence given by Colonel Pearson throughout?—I concur in his opinion as to the desirability of establishing a school of forestry, but I think that any one school established near any one large city would be insufficient; I do not think many of the men whom we would expect to get the real benefit from it would take advantage of it.

1887. One or two witnesses have expressed doubts as to whether there would be a sufficient number of students. I rather gather that you express the opinion that there would be so many students that many schools would be required?—I did not put it in that way; I would rather say that where you have a community living, taking the Duke of Abercorn's property for example, where you have 15 to 20 men employed in the plantations, if the younger part of those men could

Sir *John Lubbock*—continued.

could be got hold of and encouraged to study forestry, and let them have the help of the men and the woods round about, that would greatly meet the requirement.

1888. But would it not be better to begin with a school well equipped with a considerable number of pupils, than to begin with several not one of which would probably be well taught or largely used?—If you have one school in each province well equipped, with easy access to a woodland where the pupils could have practical training, that would do very well, but if advantage were taken of three or four large estates where there is a considerable quantity of woodland and facilities given there for these young men to be trained, I think that would cost even less than the establishment of one large school.

1889. But would it not be necessary to have a school for the more scientific part of the instruction, such as the information with regard to the ravages of insects and subjects of that character, for which purpose you must of course have access to a tract of woodland to study the practical operations?—But even with regard to the ravages of insects, it would only be by lectures that you could acquire the knowledge of insects, and if half-a-dozen lectures were given at one of those centres, as for example at Cooper's Hill, every session, that would have a very great beneficial effect.

1890. But besides the lectures would not specimens of the damaged wood and of the insects in the various stages be a very valuable part of the information?—It would certainly help the student very much where he was near a museum, but I do not think that could be done very cheaply; I do not think you could bring men from the furthest part of Ireland or from the furthest part of Scotland to London to acquire that knowledge. I think it would come to be very expensive.

1891. But supposing there were a forest school for Scotland somewhere in the north, and for Ireland, as you have suggested yourself in connection with Glasnevin, having some tract of woodland connected with it, and one at Cooper's Hill, or at Cirencester in England, would it not on the whole be cheaper to bring the young men to the particular centre where the professors would be collected, and where all the information might be given, and then take them for a fortnight in the year, or somewhere about that length of time, as is done in France and Germany, into the actual forests, would not that be the best way of giving them practical instruction?—I think in that scheme there is too little practical instruction. But supposing you establish a school in Edinburgh purely for forestry, the Professor of Agriculture, who is there now, with a little assistance could teach all the scientific part that is required. I do not know exactly whether the same facilities exist in Dublin. I don't think they do at Glasnevin. But the higher branches of botany and knowledge of insects could, I think, all be taught by Professor M'Nab; I understand he is resident in Dublin for that purpose.

1892. That is what I had rather in my mind, that these young men who contemplate taking up

Sir *John Lubbock*—continued.

forestry as a profession in life would come to Dublin or Glasnevin and attend Professor M'Nab's lectures on botany, and other lectures upon the scientific part of the subject, and also upon the subjects of mensuration, the best modes of planting, thinning, and so on, and then would go for any time that would be necessary in the year into the actual woods themselves, in order to see the practical operations carried out; how far would that commend itself to you as being a practical and useful system of instruction?—That system would be a very good system for the better class of land agents, or perhaps for the young men who have the Indian forests in contemplation; but as regards the actual managers of woods in any of the three countries, I would very much prefer that they participated in practical forest labours to a large extent.

1893. I did not at all intend to exclude that, but to suggest whether you did not consider it would be desirable to add on instruction, in connection with the subjects I have indicated, to the practical instruction?—I would have practical instruction, and I would go as far, in any school that you establish, as to give the pupils a certain per-centage of marks for proficiency in actual work; that is to say, if you gave them so many marks upon examination for knowledge in botany and geology, I would, at the same time, give them marks for proficiency in forest management.

1894. Now I will ask you one question more; supposing a man who is going to manage, not so large an estate as Lord Powerscourt's, but an estate in which there were, say, 1,000 acres of wood, it is quite clear from the evidence you have given that a certain amount of scientific education would, in your opinion, be very valuable. Now putting upon one side the practical instruction, how long do you think it would be desirable that a man of that kind should give to the mere theoretical instruction; do you think it would require six months or a year, or what sort of period, do you think?—I think it would require at least a year, but I think an average man endowed with some common sense could pick up a great deal of that as he went along; say he went through a course of scientific and practical training for six years, he could, by dint of study and observation, acquire a great deal of that as he pursued his practical studies.

1895. To put a practical question to you: supposing that a landowner has, we will say, 1,000 acres of woodland, I take purposely a very moderate amount, it would be well worth his while, would it not, to give an extra 50 *l.* a year to a man who had had the training that you have indicated?—It would pay him to give the extra 50 *l.*, I think.

1896. And upon the whole you think some such system as that would improve the general condition of the woodlands, and I rather gathered in your answer to a question put by Colonel King-Harman that if the price of wood is very low, that is all the more reason why it should be well managed?—It is all the more reason why it should be well managed; it is not only the loss in the value of the timber, but there is a national

Sir *John Lubbock*—continued.

loss by mismanagement. I have myself had to do with a considerable extent of plantation which had been so badly planted that the wind overturned the whole lot, and that had a deteriorating effect upon the adjacent lands; it brought back the land almost to its former sterility. That and several other things all point to having a really well-trained forester to enable the landowner to be sure that he is planting the proper trees upon the particular soil, having regard also to the climate.

1897. Mr. Boppe, I think, expressed the opinion that the Scotch foresters did not pay sufficient attention to planting belts for the purpose of protection; do you think that this immense destruction of timber arising from the gales of the last few years might have been greatly obviated if more attention had been paid to that subject?—I think the immense destruction from recent gales could have been reduced by three-fourths at least by proper attention to planting and thinning, and attention to keeping the drains which had been made scoured, and in a working state.

1898. I gathered from your previous answer that you attached great importance to running a belt of shelter round outside the plantation?—Yes, a belt of Scotch firs round the outside, or of Austrian pine, which is a very hardy tree.

1899. Do you think that if proper attention had been paid to that precaution, three-fourths of the destruction which did occur might have been prevented?—I have had much experience in blown timber, and have come to the conclusion that a great deal of it could be traced to pure mismanagement.

Colonel *King-Harman.*

1900. Do you believe that there is as much employment for skilled foresters at high rates of wages and salary as there was 20 years ago in the country?—I think there is.

1901. Do you not find that men are rather giving up forestry and trying to get into other situations?—No, I do not find that; but when you speak of trying to give up forestry I daresay there is a number of men drawn to it who have never acquired the practical knowledge, even in a small way, to enable them to carry it through.

1902. Is it not the fact that gentlemen are reducing their establishments, and consequently giving up the services of trained foresters, and employing instead what you may call head woodmen at less salaries?—I believe a number of them have been doing that for some time; I question very much if it is not a false economy.

Colonel *King-Harman*—continued.

1903. I am only dealing with the fact, and applying that to the expectation of young men taking up the study of forestry, and taking to it as an employment. If there is a diminution in the number of men employed in forestry, there would be therefore a less likelihood of other young men taking it up, would there not?—I think a great deal of that arises from the want of practical or scientific knowledge, I do not know which, perhaps both, upon the part of the proprietors; and it may take the proprietor the whole of his lifetime before he would come to see the propriety of keeping a man who is able to carry on a proper system.

1904. With regard to the teaching of young men at home, as you have suggested, if schools are established near large towns, Edinburgh, Dublin, and so on, do you think it would be of any advantage if a skilled forester going up there and going through a course could obtain a certificate which would enable him to take apprentice fees to train the young men in the neighbourhood or counties around, to have them apprenticed to him, say at Baronscourt, where they could be trained under him?—I would not encourage that idea for this reason, that you would get a man who would take apprentice fees, and perhaps that man does not give value to the apprentice for the apprentice fees; I would rather encourage the idea of a head forester being recompensed for his labours in training those pupils by result fees derived from their examination.

1905. Who is to pay the result fees?—The Government.

1906. Where are they to be examined?—They should be examined where they are taught by a forest inspector, say from Cooper's Hill; or supposing you had a school in Dublin, why not bring over an inspector from Edinburgh, or take over to him the Dublin pupils.

1907. The same difficulty does not appear to occur in the case of head gardeners taking apprentices and instructing them. If one or two young men are willing to pay the fees, why should not they do so just as they pay them to a head gardener?—I would not approve of even gardeners taking apprentice fees. If I were a landed proprietor, I would not allow either a gardener or a forester to take apprentice fees.

Sir *John Lubbock.*

1908. Whether you call the man employed a forester or a head woodman, his service would be much more satisfactory, and he would be a more valuable man if he had a good training?—Certainly he would.

Tuesday, 12*th July* 1887.

MEMBERS PRESENT:

Mr. Charles Acland.
Mr. Evelyn.
Dr. Farquharson.
Mr. Egerton Hubbard.
Sir Edmund Lechmere.
Sir John Lubbock.
Mr. Fuller Maitland.
Colonel Nolan.
Mr. Rankin.

SIR EDMUND LECHMERE, BART., IN THE CHAIR.

Mr. JOHN CLUTTON, called in; and Examined.

Chairman.

1909. I BELIEVE you are Crown Receiver for the southern and some of the Midland Counties?—Yes.

1910. And you are a member of the firm of Messrs. Clutton of Whitehall-place?—Yes.

1911. And you are a Past President of the Surveyor's Institution, I think?—I am Past President of the Surveyors' Institution.

1912. You have been in practice as a land agent and surveyor for upwards of 50 years, have you not?—Yes.

1913. I need hardly ask whether you have had the management of large woodlands and a considerable experience in the management of woods?—I have had the management of very large woodlands in the southern and Midland Counties.

1914. You have now the charge of the Crown lands, I believe?—Yes; south of the Trent.

1915. What is the acreage of the woods?—The woods are about 4,000 acres. They are principally in the Midland districts where the old forests used to be.

1916. You have nothing whatever to do with the New Forest, I believe?—I have nothing to do with any forests, only with the woodlands on the Crown property south of the Trent. There is only one forest in England, and that is the Forest of Dean; all the rest have been disafforested.

1917. You gave evidence, did you not, before the Select Committee on Woods and Forests in 1848 and 1849?—In 1848 and 1849 I surveyed all the forests and woodlands belonging to the Crown and made a Report; it all appears in the Blue Book.

1918. From your experience, what is your opinion as to the management of woods in England?—As regards the large proprietors their woods are well managed. As a general rule the smaller woods are not very well managed, but many of the large woodlands are very well managed indeed.

1919. Is it your opinion that there is a demand for pure foresters?—No, not in England. The whole management of the land as a rule is in the

Chairman—continued.

hands of the land agent, who is the man I think who ought to be instructed.

1920. You think, as I understand, that what is wanted is that there should be some means of giving more complete instruction in wood management to land agents?—Yes; they have almost the entire control of the land under the owner.

1921. I daresay that you have read the evidence given before this Committee in previous years?—I have.

1922. Do you think that the college at Cooper's Hill College would be a suitable place for instruction to land agents?—I do not think so. They could not afford time to go to Cooper's Hill for a couple of years. The coming race of land agents are generally educated by their fathers or families in the woods of private owners, and they come up for examination to London as a rule, although of course there are exceptions to that rule. For instance, the person who was awarded the greatest number of marks in the the last examination held by the Institution, and took the highest honours, was the son of one of our old land agents. I mention that to show the class of men coming on for land agents; they are generally the sons of old land agents.

1923. You think on the whole I gather that the course at Cooper's Hill would be too expensive for that class of men?—Yes; they could not do it.

1924. Could you give the Committee your views generally upon the subject of a School of Forestry?—Yes, I will read it if you will allow me. I have drawn up a Paper, stating my views, in conjunction with Mr. Julian Rogers. He and I talked the matter over many years before this Committee began to sit.

1925. Mr. Julian Rogers is the Secretary of the Surveyors' Institution, is he not?—Yes; he knows the wants of the surveyor class.

1926. Do I correctly understand that those are your views after conference with Mr. Rogers?—Yes, this Paper expresses my own views; but of course at my age I cannot work out the whole

Chairman—continued.

details of it, and Mr. Rogers was kind enough to aid me.

1927. Might we look upon them as Mr. Rogers's views as well as your own?—I think I may say so; he is in the room, and I believe he acquiesces in my views entirely. These are views which I have held for many years; they are not consequent upon the examination of witnesses before this Committee.

1928. We shall be glad if you will kindly communicate them to the Committee?—In my opinion: (*a.*) The school should be National, that is a separate State School with the resulting prestige, presided over by a public official. (*b.*) It should also be representative of all the interests concerned, the landowners, the land-agents, the agriculturists, and the horticulturists. (*c.*) The only way to combine (*a.*) and (*b.*) is to make the officer referred to in (*a*) the head (responsible to the Government) of a Board of Advice constituted as in (*b.*) (*d.*) A Board so constituted would be in continuous practical touch with all the interests concerned; would be free from all suspicion of alliance with commercial interests, or of working for the advantage of any particular body. (*e.*) Such a constitution would recommend itself to Parliament on the ground that it combines Government control with the *vis vitæ* of private enterprise and would probably attract financial support from the bodies represented, in reduction of cost to the State. (*f.*) It would utilise, without supplanting, existing agencies for the teaching of Forestry and its allied subjects. (*g.*) The sole aim of such a school would be to add a special knowledge of Forestry to general professional knowledge gained in a great variety of ways without interfering with the student's liberty in this respect by forcing on him some particular professional curriculum. (*h.*) A body devoting itself to this subject only would possess a flexibility which it could not have if tacked as an addition to any present organization. (*i.*) A separate State Department might hope to enlist the active co-operation of landowners who are in a position to afford opportunities for the study of various systems of management, good and bad. (*j.*) Skilled teachers expect high remuneration under ordinary circumstances, but willingly take less for work in connection with State-appointed offices. So much for the arguments in favour of a National School of Forestry upon an independent basis. Then I would add the following arguments against allying the school with existing Institutions. (*a.*) There is no body which possesses claims which others cannot urge; the identification of any one of them with the school would lead to rivalry where general co-operation is specially desirable. (*b.*) All these bodies could be united in one common aim on a Board of the kind suggested. (*c.*) It would be wrong in principle to grant what would be in effect a State subsidy to a private enterprise working on a commercial basis. (*d.*) A large number of land owners and land agents have neither the time, the money, nor the disposition to go through a tedious college course, gaining what knowledge they want in other ways. The effect of linking

Chairman—continued.

the school to any existing college curriculum would be to put a brand upon every one preferring or compelled to gain his general professional training in other ways. (*e.*) What (if the school were independent) would be the business of all the important interests concerned would very shortly become the business only of the body to which the school was tacked. (*f.*) The head of a Forest School should be an expert, and not a mere administrator. (*g.*) Valuable collections would be one most important result of the establishment of a National School. These collections should clearly be housed in Government buildings under the care of Government officials, not in private buildings in the provinces. Those are the views which I beg to submit to the Committee.

1929. You are in favour of an independent National School of Forestry rather than attaching Professorships or Chairs of Forestry to existing institutions?—Certainly.

1930. And independently of the establishment of such a school, pending the further consideration of the subject, you would be in favour of constituting a board representing the various bodies such as the Surveyors' Institution?—Yes, having at its head a Government official who should be an expert in the matter.

1931. So that if no other result took place from the deliberations of this Committee, you think that a representative board might be formed, at any rate for the further consideration of the subject, and you would recommend that I understand?—Certainly.

1932. There is one further question that I should like to ask: from your experience do you think that the present system of rating woodlands has a prejudicial effect in preventing landowners planting as much as they otherwise would do?—It is very difficult to say, but everything that weights woodlands or the growth of woods of course is an obstruction to a certain extent; moreover the clause under which they are rated is so indefinite that it is very difficult to rate woodlands justly.

1933. At present there are many thousands of acres I suppose which do not pay landed proprietors at all?—Common woodlands pay nothing at all of late years; we can scarcely sell any produce from woodlands; it is only the small oak trees that we can sell at any profit at all.

1934. Do you think that there is any prospect of timber rising in value so as to induce landed proprietors to go to greater expense in planting timber?—We ought always to continue to plant, but I doubt whether so long as we can get it from abroad so cheaply there will be a rise in the value; railway charges and so on, prevent our using the small produce of the thinning of woods.

1935. Do you think that the dissemination of more practical knowledge of woodland management would in time make woodland cultivation more remunerative?—We should understand better how to grow a quantity of timber. I consider that the land agent's business is to grow the largest produce on the smallest quantity of land. It is impossible for us to tell what the importation of timber or what the price may be

at

Chairman—continued.

at any future time. I was very much interested in the returns made from the colonies, which led us to suppose that sooner or later the produce of colonial timber would be very much decreased. I aided somewhat in getting some of the returns published in the year 1878, which Mr. Julian Rogers was good enough to get out.

1936. Do you think that some of the agricultural land which is now lying waste might be profitably applied to planting?—It should be planted, no doubt. There is a vast quantity of waste land which is utterly useless either for recreation or cultivation, at present. It ought to be planted no doubt, but no private owner could plant it because the time taken by timber to grow is so long that in the present state of agriculture it would pay nobody to do it. I can state that the present thinnings of woodlands are almost utterly worthless; you can get nobody even to take them away; they are lying on the ground rotting. There is absolutely no demand for the thinning of young plantations or underwood excepting in particular districts. When that will cease to be so of course I cannot tell.

Sir *John Lubbock.*

1937. Has your attention been called to Colonel Pearson's evidence given before the Committe last year?—Yes, I read it last year.

1938. You differ from him in several particulars, I observe?—Yes.

1939. The objection which you stated to Cooper's Hill, as I gather, rather was that the course was too long?—Yes.

1940. But the course is not too long, is it, for foresters who are to be employed in India or the Colonies?—I am talking of land agents and of British forestry, not of Indian or Colonial forestry. Probably that course may be quite correct for foresters intended for India or the Colonies, but there is not a sufficient demand for foresters of a high class in England to make such a course desirable. The forests in this country are so small, by comparison, with anything that there is in India or the Colonies. I do not object to the course at Cooper's Hill for foresters going out of England, but I think that it is unnecessary for those staying in England.

1941. Might it not be the case that where the appliances for their thorough scientific preparation are already collected it might be advisable to have some shorter course for land agents and woodreeves?—Certainly, somewhere, but I think that might be best got by a Government school.

1942. Your idea would be, would it not, to transfer the forest officers in training at Cooper's Hill for India and the Colonies to this new National School?—I would rather not give any opinion upon Cooper's Hill at all, because I really know nothing of it.

1943. Would not it be desirable, in your opinion, as the number of those studying forestry is not very large that they should all be collected in one place?—Yes, if it were possible.

1944. And you might in that one institution have a longer and more thorough course for the higher officials, and a shorter course for land agents and woodreeves, might you not?—Yes. There are certain advantages no doubt at Cooper's Hill. They have, I believe, access to the Crown plantations, which are the best in England almost, and of the greatest value.

Sir *John Lubbock*—continued.

1945. You would agree I presume with Colonel Pearson that it would be very desirable, if not necessary, that the students at any forest school should have access to a tract of woodlands for the purposes of practical instruction in forestry?—Certainly, but interference with the management of woodlands is not necessary at all.

1946. You do not think, I understand, that it would be necessary that the professors or authorities of the school should manage the woodlands so long as they had access to them?—That is all that is necessary.

1947. I understand you to say that you are not yourself sufficiently acquainted with the actual management and condition of Cooper's Hill to express an opinion as to how far it would be possible to carry out your ideas at that Institution?—Quite so; I do not know the course of instruction at Cooper's Hill.

1948. Therefore, if we accept the principles which you have laid down it will be necessary to obtain some further information as to the condition and position of Cooper's Hill, before we can say how far it would be suitable for such a school as you have indicated?—Yes. The Committee will quite understand that I am a land agent, and not a scientific land agent, I am sorry to say. There was no scientific training in my day; when I began life 60 years ago, I had no opportunity of being taught forestry of any kind. All I know I have learned from my practical experience of woods which has been very extensive.

1949. I suppose it would be the case, would it not, that all that the lower grades would require to know would have to be learned also by those who were going further; that is to say, the higher education would be in addition to what would be required for a land agent or woodreeve?—I think the land agents should instruct the lower class of men under them. If a land agent is well instructed, I think the lower class will acquire from him sufficient knowledge for practical purposes without their going to any school.

1950. My question rather was whether you would not consider that the information which it would be desirable that a land agent should have would also be desirable information for the higher forest officials?—Certainly.

1951. What I mean to say, is that the education that would be suitable for land agents and woodreeves would be the basis of the education on which the larger amount of information would be built in the case of forest officials going to India or the Colonies?—Clearly.

1952. So that there would be a convenience in having in the same locality the whole of the forestry instruction both for foresters and land agents?—Possibly.

1953. We

Sir *John Lubbock*—continued.

1953. We have had some evidence with regard to the case of Scotland and Ireland; have you any strong opinion as to whether it would be desirable to have separate schools for Scotland and Ireland, or would you, at all events, in the first instance, as I rather gathered from your evidence, have one national school only?—I would have only one national school; because all exceptional practice, whether in England, Scotland, or Ireland, must be acquired upon the spot. I will take, for instance, the north of England and Scotland, and the south of England; the management must be absolutely different in the South of England from what it is in the north; we grow a different class of tree altogether in the south. And I would go even further than that. I would say that the management of an estate in Buckinghamshire is totally different from the management of an estate in Sussex or Surrey, for in Buckinghamshire you cannot grow an oak that is worth looking at on the chalk hills, and in Sussex and Surrey on the clay they can scarcely grow a beech tree that is worth looking at; the soils are so different that they require an absolute different management; and it is the same with regard to Scotland.

1954. Your idea would be to have one National institution, and that any practical knowledge, which differs in different parts of the country, should be acquired upon the spot?—I think the exceptional practical knowledge should be acquired on the spot, and it can clearly be done in the way I have proposed.

Mr. *Rankin.*

1955. As I understand you are in favour of establishing a National School of Forestry?—Yes.

1956. Do you think that there would be a sufficient number of persons attending such a school to make it self-supporting?—To a great extent, I think, it would be.

1957. But would you ask the Government to make some grant towards it?—I would not go to any great expense with the National School.

1958. How is it in your opinion to be supported?—Partly by the Government and partly by fees, as Mr. Julian Rogers indicated when he was examined here. I accord very much with the evidence given in Mr. Julian Rogers' examination before this Committee. He has gone very minutely into the question of the instruction which I am not so competent to touch upon.

1959. What is your special idea as to the national importance of such a school?—I think with the increased knowledge we should increase the quantity of timber which we should be able to grow upon a given quantity of land.

1960. Do you think that the increase of timber in this country is a matter of national importance?—Certainly; I think so. It will be some day certainly, as far as I can ascertain from inquiries; I have never been abroad in the great forests of Germany or France.

1961. At the present time when we can import timber more cheaply than we can grow it, would you say that it is even now a matter of national importance to increase the timber in this country?—No, but I think you ought to

Mr. *Rankin*—continued.

provide for a future time, because timber takes 50 years before it is useful.

1962. I am coming to that presently, but my question is, do you think it is now a matter of national importance to increase the timber in this country?—I think there is a great quantity of land that, from a national point of view, ought to be utilised for some purpose, and the only purpose which I can see to which it is applicable is planting.

1963. Why is it a national importance that land should be utilised as you say for planting timber more largely, if it costs more to produce timber here than it does to get it from foreign countries?—Surely the same may be said with regard to wheat and other products. You can get wheat more cheaply from abroad than you can grow it here, but still you would not have all the land go out of cultivation.

1964. What reason have you for selecting timber for a special national grant any more than wheat for instance?—I do not know that I can give you any better reason than the appointment of this Forestry Committee.

1965. Do you see any reason for putting your hand upon forestry as a particular subject for a national grant any more than a great many other commodities?—There is this reason that it takes 50 years to get timber into a profitable or useful state, whereas in the case of wheat you can grow it in 12 months.

1966. It is your opinion as I understand that it is the duty of the nation to provide for some unforeseen danger or scarceness that may arise in time to come?—I think so. That is what they did in the last century. Almost all these valuable woodlands of which I have the management for the Crown were planted shortly after the beginning of this century in consequence of the Commission of Lord Glenbervie which sat in the early part of this century.

1967. Have they been a national or a pecuniary success?—They are certainly not a loss to the country. They produce a considerable income now; I am speaking of woodlands, not of forests; forests that are subject to common rights and other rights which may be in conflict with the rights of the public using the public in its broadest sense, I cannot speak to, but woodlands which are not inclosed and are not subject to rights conflicting with those of the public are valuable and are paying a fair interest.

1968. You have made calculations I presume to convince you that that is the case?—It is a long story, but I may say briefly that I have for many years kept a record of particular trees and particular parts of plantations for my own purposes; and I can tell you what they cost originally and what they are worth at the present time, and what the thinnings have been worth for a great many years. I have done the same in Richmond Park entirely on my own account, although I am sorry to say that I have not kept up the records as I ought to have done.

1969. Have you such an account for any considerable area of woodlands?—You cannot do it for any considerable area of woodlands; you must try it in small portions only, and I did it to satisfy my own mind whether it is profitable or

not

Mr. *Rankin*—continued.

not. I could not go into a large tract of a 100 acres of woods; it would not be worth my time to do so, but I got the figures from a small space, and I judge from the results of that, that woodlands can be made to be, and are made profitable.

1970. Have you any short statement which you could put in to that effect?—I can tell you what the woods produce now.

1971. I wanted rather to get a debtor and creditor account showing the whole process in order to see if woodlands can be made to pay?—I can tell you what some of the woods of which I have charge are producing at this moment.

Chairman.

1972. Perhaps you could put in those accounts in order that they may appear upon the notes?—I would rather not put them in, as these woodlands are not my own property of course, but I should be able to answer any questions as to my own experience which may be put to me.

Mr. *Rankin.*

1973. I will ask you the question generally; do you think for a series of years, calculating the loss of rent and the loss of interest upon the rent, timber can be said to pay?—I think so, if it is judiciously planted and judiciously managed. With regard to a subject upon which the Chairman asked me a question just now, the subject of rating, I quite admit that the accumulation of rating is very much against the paying of woodlands.

1974. That is a necessary expense, however, which must be taken into consideration, is it not?—It has only been imposed in modern times. Under the Act of Elizabeth there was no rating on woodlands.

1975. But it is now an expense which must be taken into consideration?—Quite so.

1976. I understood you to speak of a board; would that be an examining board?—Yes.

1977. That would not be in place of the Forestry School, would it?—No. I would let the students get their education where they liked.

1978. That would be in addition to the National School of Forestry, would it?—Yes, distinct from it.

1979. Do you think that an examining board, elected or appointed by the State, would be sufficient for the purpose of the education of foresters, or do you think that there would be also, in addition to that, a national school of forestry required?—I do not think that a national school of forestry is required for Britain at present; I think it is too expensive. As to having 3,000 acres of forest, or even 300 acres, I do not think it is possible. You cannot get a forest with 300 acres, and if you plant 3,000 acres of bare land that will afford no instruction to a young man studying forestry; he wants to go into a forest which has been in existence for years.

1980. With regard to a working forester, what is your opinion as to the best method of training such a man practically?—I should advise training him upon the spot where he is wanted to work.

1981. By apprenticing him to another forester, do you mean?—Certainly. It is no use bringing a man from Scotland to our south country-woods; he will take several years to learn his trade.

Mr. *Rankin*—continued.

1982. Your opinion is that he would make a better practical forester by being apprenticed to a practical forester than by being sent to a school of forestry?—I do not say that he would not be the better for some knowledge of botany and so on; of course, all knowledge is useful, but what I mean to say is, that in every district the pecularities of the district are so various, that a practical forester ought to learn his business in that district where he is to work. Let him have scientific education somewhere else if he can afford it.

1983. You spoke just now of some Colonial Returns; are there any returns showing the acreage and character of woods and forests in Great Britain?—Of course the Board of Trade returns show the quantity of land in wood; I think it is 2½ million acres.

1984. Those returns are not published every year, are they?—They are published every year, so far as I know, and I think I am correctly informed.

Mr. *Charles Acland.*

1985. Did I rightly understand you to say that you did not think that a private owner ought to plant with any view to profit?—I did not say he ought not to, but I say that very few owners can afford to plant and be out of the money for 50 years.

1986. I believe that you are agent for the Ecclesiastical Commissioners also?—Yes, my firm are.

1987. And there you represent a permanent corporation?—Yes.

1988. And speaking as their representative you would not say that planting was an unprofitable thing to do?—I say that there is profit to be obtained from it, but the income is entirely in the future.

1989. The times are not good enough for a man to spend money in planting, but those who can afford it may hope to get a profit in the course of years; is that your view?—If I was a rich man and could afford to wait for the income I should plant timber myself and I think I could make it profitable.

1990. I gather that your opinion is that planting operations and wood operations in Britain are not on a sufficient scale to justify any expenditure on the part of the Government?—I did not say "any" expenditure; I say "any very large" expenditure. I should say that it was worth making some expenditure.

1991. Could you give the Committee any idea as to what that expenditure should amount to; would it to be 2,000 *l.* or 1,000 *l.* a year?—I could only refer you to Mr. Julian Rogers' evidence; I cannot go into the details of that question.

1992. Do you mean the evidence which he gave last year?—At the end of last Session I think it was.

1993. Do you think that a grant, say of 1,000 *l.* or 2,000 *l.* a year, would be anything like the kind of thing that would be of any use?—Certainly, I think so.

1994. Should such a school, if it is established, be in your opinion intended to teach only a scientific knowledge of the subject with a view to the employment of the men taught there,

Mr. *Charles Acland*—continued.

all over the Empire, India and the Colonies, Canada and other places as well as England?—I think that the two might be combined, but you are asking a question that I am hardly competent to give an opinion upon; knowing from my own experience that a little scientific education 50 years ago would have been of great value to me, I wish to state that I think all men of this class should have an opportunity of acquiring this knowledge if they can get it. I lived long before any of these schools and educational appliances were in vogue. All the knowledge I have obtained is from actual experience in woods from practical work, but I have always felt the want of scientific knowledge, and therefore I would if I could advocate some such scheme as I have suggested for giving that knowledge.

1995. In order to be remunerative it must be done on a sufficiently large scale to teach a good many men, and you do not think that there is sufficient demand in Great Britain, as I understand, for men of that kind to fill a school?—Not such a school as Cooper's Hill; but I think there are many men coming up to our institution to be examined, land agents and surveyors; there are 60 or 70 every year, and they would many of them require to go to such a school, or at any rate they would wish to go.

1996. You would be more in favour of having a separate institution for this purpose than of enlarging the instruction at the existing agricultural schools, such as Cirencester and Downton?—I think it would be really wrong to place this training in the hands of any establishment based on commercial principles; I think it should be a Government school. My view is that you should not give any special advantage to a school that is established on commercial principles. I did not say the same with regard to Cooper's Hill, because I understand that that is partially a Government establishment.

1997. But as I gather, you would not contemplate this establishment being at all directed towards the instruction of ordinary workmen or the lower grades of foresters?—No.

1998. You have it directed simply to the higher grades?—Yes, and they could very well impart the knowledge to the people below them. The whole management of English estates is almost entirely in the hands of land agents. We have no such thing as legal factors in England as they have in Scotland, at least I do not say that there are no such cases as are common in Scotland, but where it is so it arises from peculiar circumstances. The management of land in England is very much in the hands of land agents and experts if you so choose to express it.

1999. But I gather that you consider that the management of woods in England and Scotland is too much a matter of detail to be taught in schools like this, the differences between one district and another being so great?—The differences are very great.

2000. So that the general instruction in forestry which would be applicable to the whole of Great Britain is very limited?—It is limited, but there is quite sufficient room for some scientific education through the agency of a Government school.

Mr. *Charles Acland*—continued.

2001. You think then that an examination would not be sufficient without a school?—I think that you must have a school as a basis, but I would let any one come in to be examined from any quarter, from agricultural schools, from private woods or anywhere else, and if he is competent I would send him out to India or anywhere else.

2002. I see it would give a kind of diploma?—It would be a diploma.

2003. You think that the Government ought besides giving the diploma to afford some special opportunity of scientific instruction to assist those who wish it?—I think it would be found eventually very valuable for the Government to have done so.

Mr. *Fuller Maitland.*

2004. I think you said that a certain number of land agents come to you every year to be examined, did you not?—They come to the Institution. I am only one of the members of council; Mr. Julian Rogers can give you any information as to the number; I cannot.

2005. Is there any instruction given there, or is there only an examination?—There is no instruction given; it is merely an examining board.

2005. Your idea with regard to the school or board which you propose to establish is that persons wishing to qualify as land agents in England or Scotland would go to that school for examination or for instruction?—Yes, for examination.

2007. And not for the purpose of obtaining positions purely as foresters, but rather as land agents?—Certainly. In England there is no demand for a pure forester; there is not a sufficiently large demand here for men requiring the pay of a highly educated forester who has gone through such an education as I understand to be carried on at Cooper's Hill. Of course in India and the Colonies where you have millions of acres it is a very different thing.

Dr. *Farquharson.*

2008. With regard to your proposed national school, do you propose to instruct a land agent in all branches of his business or only in the business of forestry?—Only in forestry.

2009. It would be purely a forestry school?—Yes.

2010. Do you think that forestry is a large enough subject to make it desirable to have a special school for the purpose?—I think it could be carried on at a small expense; I do not think that there should be a very expensive school.

2011. What subjects would you include in your curriculum?—Botany, agricultural chemistry, sylviculture, and a few others.

2012. But you would propose only a very short course in each of those subjects, I presume?—Yes.

2013. Only so much of botany for example as is necessary for learning, but learn the practical work of forestry?—Quite so.

2014. I did not understand fully the relation of examining Board to the school; would the examining Board be separate or would you have it as part of the school?—Separate from a school, which could be grafted on it, later on; but

Dr. *Farquharson*—continued.

but I confess I am not competent to go into details about the school; I feel only the want of something of the kind. Other people who are in the habit of teaching or examining would give that information better than I can; I speak merely as a land agent in large practice.

2015. Do I rightly understand you to suggest that your examining Board should undertake to examine young men who had not been educated at the institution you propose?—Certainly.

2016. Is there not already a machinery in existence for that purpose; does not the Royal Agricultural Society profess to do that?—Yes, in agriculture.

2017. And in forestry too, does it not?—I was not aware of that. We examine to a certain extent in forestry at the Surveyors' Institution.

2018. I suppose you would admit that even if woods were not directly profitable as commercial speculations still there are many advantages in connection with planting which would still make it incumbent upon landed proprietors to plant largely?—I think so, because it affords a considerable amount of labour, and our country would scarcely be what it is unless planting were continued to some extent certainly. But there is such an immense quantity of common land absolutely useless now for any purpose. It is kept for recreation, I believe, nominally; but only picture to yourself 40,000 acres of uncultivated land in the New Forest. What can be the use of that 40,000 acres.

2019. Is that land well adapted for planting? The planting was stopped by the House of Commons in the year 1878, I believe it was.

2020. Is it not of any value for grazing purposes now?—They turn out forest ponies and cattle on the borders of the forest, but you see very little in the inside of the forest.

2021. You get great advantages from planting, do you not, in the way of shelter for cattle and improving the climate?—Yes, and being open common land the timber is not reproduced as it is in our part of the country. Throughout all the country where I was brought up it is reproductive wood, natural wood; all our oak trees are self-sown; we never plant any oak trees.

Mr. *Evelyn.*

2022. You consider, as I understand you, that there is a great quantity of waste land that might be planted, and ought to be planted?—Yes.

2023. Would you be in favour of the Government purchasing that waste land and doing the planting itself?—That is a most difficult question; some part of the country sows itself and does not require planting at all.

2024. You think that there is a special reason for the State encouraging the growth of timber in the fact that, as I understand you, hereafter it might be dangerous for us to be solely dependent upon foreigners for our supply of timber?—Yes.

2025. You said that there was no demand now for the thinnings of young plantations?—There is no demand.

Mr. *Evelyn*—continued.

2026. But there used to be a demand?—A great demand.

2027. Why is there no demand now?—Because coals are brought so cheaply into the district, and poor people being better paid, will not take the trouble to come and fetch the wood.

2028. The profits of woodlands are much lessened from what they were, from various reasons?—The profits of woodlands are not half what they were.

2029. And you think that notwithstanding that decrease in the profits of woodlands it would be worth while to found a national school for scientific instruction in forestry to land agents?—I think it would. I have destroyed more woods, I am sorry to say, than most people probably, but I should like to see them restored again.

2030. Is it the fact that there is a great decrease, so far as your experience goes, in woodlands; are they being broken up and brought into arable or pasture?—I have been the means of breaking up 10,000 acres.

2031. You said that in Surrey and Sussex, if I understood you rightly, you can hardly see a beech tree growing that is worth looking at; that statement admits of some qualification, does it not?—I said in certain soils.

2032. In the green sand formation near Dorking and Reigate, there are magnificent beeches, are there not?—Yes, I did not mean that; I said that on the Weald, on the clay-land in Surrey and Sussex, there was not a beech worth looking at.

2033. Surrey and Sussex are counties of very varied soil, are they not?—Yes, very varied soil; none more so.

Sir *John Lubbock.*

2034. It was this Act, the New Forest Act of 1877, which you referred to just now I think (*handing a copy to the Witness*)?—Yes, that is it.

2035. Do you think that it would be very desirable if some of that district was re-planted?—I think it is perfectly monstrous to leave 40,000 acres practically to a few common cattle and horses.

2036. Dr. Schlich in his evidence before the Committee stated that in his opinion the New Forest was a better subject for a school of forestry than Dean Forest?—It is better.

2037. Mr. Lascelles, Deputy Surveyor of the New Forest, gave it as his opinion that the restrictions as to management of the woods in the New Forest contained in the New Forest Act of 1877 (no doubt referring chiefly to Sections 5 and 6 of the Act) entirely prevented the woods being managed in such a manner as to make them of any use as an example for instruction in scientific forestry; what is your opinion with regard to that?—I quite agree that the New Forest is in a most anomalous position.

2038. And so long as this Act remains in force the New Forest cannot be a proper subject for forestry instruction?—No; you can scarcely cut an old tree there.

2039. With regard to the question of the profit of woodlands is it not a fact that as we have from two million to two and a half million acres

Sir *John Lubbock*—continued.

of woodlands existing if the profits are diminished, it makes it more desirable that the woodlands should be more economically managed?—Quite so.

2040. With regard to the questions asked by the honourable Member on my right (Mr. Rankin) as to the grants from the State, it is the case at present, is it not, that the State is carrying on the instruction in forestry in connection with Indian forestry?—So I understand.

2041. And therefore if an additional number of young men were sent to partake of the advantages of that instruction, it is probable, is it not, that the expense to the State would be rather diminished than increased?—Yes, if the wants of land agents could be so provided for, which I doubt. I was very anxious about this matter some

Sir *John Lubbock*—continued.

years ago, when the Duke of Argyll was at the India Board, and I went with a deputation to induce him to take English and Scotch foresters by examination; but he gave us the cold shoulder, and we could not do anything at all. But from that period I have always thought that with a school of forestry conducted at a moderate cost, young men would so far educate themselves as to be able to take Colonial and Indian appointments.

2042. And the additional number of students would tend to diminish the actual cost of the Institution to the Government?—Certainly, if students of the land agent class could be induced to go there, and if their wants could be met by such an arrangements of which I am doubtful.

Mr. EVAN POWELL, called in; and Examined.

Chairman.

2043. YOU live at Llanidloes in Wales, I believe?—Yes.

2044. And you are a Fellow of the Surveyors' Institution?—I am.

2045. And you also practice as a land agent?—Yes.

2046. Have you had some years' experience?—Yes; I have had upwards of 30 years' experience as a surveyor.

2047. And you have had experience of planting?—Yes; we have planted very extensively.

2048. And of the management of woods?—Yes; and of valuing and marketing timber, more especially in Wales, but also in other parts of the country; Devonshire for instance.

2049. You have travelled a good deal in the United States, and other foreign countries?—Yes; I am managing director of a company in the United States where lumbering is one of our operations.

2050. Have you in your travels in foreign countries paid any visits to the foreign continental forest schools in Germany, for instance?—I have not visited any of the schools. I have visited some of the German forests but not the schools.

2051. You are well acquainted, are you not, with the prospects of the timber trade, and as regards the quantity of timber imported from those countries?—Yes; more particularly from America, but I am also acquainted with the imports from other countries.

2052. What is your opinion as to the future prospects of the timber trade?—I think that for some years the timber trade in this country will be very depressed, but I think the time will come when timber will be scarce here.

2053. Do you think that there will be a good prospect for the home-grown timber?—I think that in the future there undoubtedly will be.

2054. Could you give the Committee your reasons for that opinion?—Yes. I think that the future imports of timber are likely to very materially decrease; firstly, owing to the very few countries in Europe conserving a supply of timber equal to the demand in those countries, for I think that with the exceptions of Germany and Bavaria there is no country in Europe

Chairman—continued.

that produces as much timber as is consumed in the country. Secondly, owing to the rapid denudation of the forests in the United States and Canada, and also in Sweden and Norway, judging from what I hear (for I have never visited those countries). In the United States of America, and in Canada also, there is an immense destruction of forests annually by fire. I have here the census reports of the United States in which they very carefully go into the production of timber, and also the destruction of timber; and I think that it is estimated that in the year 1880 there was something over 10,000,000 acres destroyed by fire. Fires which do not affect the large timber will destroy all the young timber up to 15 or 20 years' growth; a fire that will run along the leaves and not materially injure the large timber will utterly destroy the young timber. Then again, throughout almost the whole of the United States there are cattle and stock running over forests, and the destruction by browsing to the young trees is something enormous. Then along nearly all the navigable rivers in the whole of the United States you will find that timber has been cleared away, and it is only as railways are developed through the country, or rivers are made navigable, that future timber lands are being opened up for supply, and as a matter of fact, timber is selling at the present time on the eastern seaboard of the United States at higher prices than it is selling at here.

2055. Do you consider that there is a diminution in the supply of home-grown timber at present?—Yes, I think that a very large amount of timber has been cut down within recent years and that an equivalent amount of young plantations have not been formed. I should say as illustrating the rapid way in which the primeval forest is being cut in America, that in the case of our company we have had one mill there which has been clearing at the rate of nearly 1,000 acres a year of primeval forest.

2056. Could you give the Committee what you consider to be the reasons for the diminished amount of planting and of the general growth of timber at present?—The diminished amount of planting is caused first, no doubt, by the scarcity of

Chairman—continued.

of money and the depressed times, and also by the long period which the proprietor has to wait for a return of his money; I think also that the rating of woodlands has had a deterring effect on planting. I think it was a most injudicious law to pass; it was just the last straw that broke the camel's back. Other countries are endeavouring to extend the planting of timber. In the United States, for example, as an encouragement to planting, all land planted is exempted from taxation, and not only that, bnt a premium or bounty is offered for planting. It seems to me England is taking less care for the conservancy of her woodlands than any other country.

2057. Do you think that the railway preferential rates given to foreign timber over our own timber have affected the prices of home-grown timber?—Yes, that has affected the prices, and consequently the inclination to plant. I think the rates at present are most unequal and unfair. Foreign timber landed at Hartlepool, for example, comes from Hartlepool to Wales at a less rate than that for which we can send British timber half the distance. And then, again, the rates for the conveyance of timber in England contrast most unfavourably with the rates in America. We can send timber for 700 miles in America for less than we can send it 100 miles in England.

2058. Is it your opinion that, in spite of the drawbacks that you mention, namely, the rating of woodlands and the preferential rates of railways, home-grown timber can still be produced at a profit?—Yes, I think so; at least certain classes of timber.

2059. What classes of timber do you consider could be produced at a profit?—Larch, especially on the mountain sides in Wales. Latterly there has been a great deterring influence in planting larches, owing to the destruction of the young larch by the larch bug, which in many cases has destroyed whole plantations. Of recent years I have guarded against that by planting, whenever the ground was suitable, the Douglas pine, which I look upon as one of the trees of the future.

2060. Is that less liable to the ravages of the bug than the larch?—It does not seem to be liable to any disease whatever; the bug does not affect it, and no insect as far as we know affects it. Of course it has not been introduced into this country very many years yet; I think it is a very good timber also; I have seen it growing in California, in its native forests, and I know it is there considered the best timber; it is specified in all government works as the timber that should be used, and I see no reason why the timber should not be of equal quality in this country, but it has not been planted here long enough to have fully developed yet.

2061. Have you given your attention to the question of the establishment of a school of forestry?—I have given it some attention, but not as much as I have given to other practical matters connected with forestry.

2062. What are your general views upon the subject; you heard, I daresay, the evidence given by Mr. Clutton; do you concur with his views that there should be one national school, or do you think that there should be more than one

Chairman—continued.

school, and that schools of forestry should be attached to the existing institutions?—I think that at first there should be one school. I have read the evidence given by Mr. Julian Rogers, and I think the scheme he has propounded will meet the case generally, and is one which I may say entirely meets with my approval. I think you should commence with a school on not too large a scale, but I feel pretty sure that such a school will very largely be taken advantage of for the education of future land agents.

2063. You are aware, are you not, that at present a good many land agents go to the existing colleges, such as Cirencester and Downton?—Yes.

2064. Supposing that instruction in forestry was given there, they would be able to combine with it a curriculum of agriculture, would they not?—Yes.

2065. But in any special forestry school there would be nothing more than forestry taught, according to your idea, I presume; would you get a sufficient number of pupils able to devote one, two, or three years to the study of forestry alone, unconnected with agriculture?—I do not think it would require so long a time as that. I think that forestry would be taken up after the student had completed his education in most other subjects. I certainly think that London ought to be the place for such a school, because the student could avail himself of the lectures upon other subjects as well as attending the school of forestry.

2066. Looking at the fact that the larger number of students would probably be of the land-agent class, would it not be better that the school should be connected with some agricultural college or institution of that sort?—I do not think so, because I think the majority of land agents now are not trained at those schools.

2067. Speaking as regards England, what situation do you suggest for the central national school?—I think London would be the best for the lectures.

2068. Do you mean in connection with the Committee of Council on Education, at the Science and Art Department, at South Kensington?—I have not given much thought to that matter, but the scheme which Mr. Julian Rogers, has formulated meets with my approval, and I cannot suggest anything better than what he has proposed in his evidence.

2069. I gather that you think that elementary forestry might be taught in rural board schools?—Certainly; I think that board schools should teach the rudiments of botany, not only as regards forestry, but as regards the natural grasses and other things (which is, of course, foreign to our ultimate subject), but it would be a very useful training for the class of woodmen who would act under the land agents.

Mr. *Rankin.*

2070. I understood you to say that you you thought that we had nothing to fear from America as regards the importation of foreign timber into this country?—At the present time, there is a very large importation of timber from America to this country, and that is no doubt one

Mr. *Rankin*—continued.

of the causes that has brought timber down to its present price. For instance, we are having an enormous quantity of what is ordinarily called pitch pine, *pinus australis*, and from the Southern States of America. I had occasion, about four years ago, to inspect a large timber property there of nearly half-a-milllion acres, and I saw during my visit there that the timber had been cleared along the navigable rivers, where it was some distance from the river, in order to get rid of it; the trees were girdled one year, and set fire to the next. I have seen thousands of acres of magnificent timber being burnt simply to clear the land for growing cotton. You can buy the land with the timber for a dollar and a quarter, or say five shillings an acre, and after you have cleared the timber the land is worth more; consequently, timber can be had there for nothing except the cost of carting to the river, and the manipulation of it. That is causing timber to be sent to this country now at excessively low rates.

2071. In what States of America did you find that to be the case?—The timber which I inspected was in Georgia, but I have also inspected timber lands and heard the same thing spoken of in Tennessee, West Virginia, and Florida.

2072. In the north and west of the United States is there very little timber?—On the eastern seaboard of the United States, except in Georgia and Carolina, timber is getting very scarce indeed, and, in fact, they get nearly all their timber imported from further west.

2073. Do you know whether Canada is sending much timber to this country at the present time?—Yes, it is sending a good deal; but the timber that used to be sent from Canada, the Quebec yellow pine, has become almost worked out; there is hardly any of it obtainable now.

2074. I understand you to be of opinion that it would be a good national investment to spend money now in planting timber in the hope of gain 50 or 60 or 100 years hence?—Certainly I think so, and I think that even at present prices if we could be sure of the plantations being free from disease (and it is only in occasional years that we have disease) it would pay to plant under certain conditions. For instance in Wales, upon mountain sides, I think the larch might be planted upon land that is not of greater value than 10 *s.* an acre; although personally I would not plant land that was worth more than 5 *s.* an acre, except under exceptional circumstances. I have made a calculation with regard to that point, and I consider that an acre of land in 40 years (taking average land, in some cases it might be a little more, and in some a little less) would produce 2,400 feet of timber, and that timber at 9 *d.* per foot would be equal to 90 *l.* an acre. I have sold a great deal of larch timber at 1 *s.* 6 *d.* a foot, but at present it is not worth more than 8 *d.* a foot; the price depends, of course, upon the locality, how far it is from the station, and so on. But taking it at 8 *d.* per foot, that would give 80 *l.* per acre. I consider that the cost of planting would be about 4 *l.* an acre, plant, ing the trees 6 feet apart, and planting a part of it with other than larch, *Abies Douglasii* and Scotch pine, and other trees as a shelter; I think

Mr. *Rankin*—continued.

that 4 *l.* an acre would represent the cost of fencing and planting in that way, on an average. That would amount to a total of about 19 *l.* 5 *s.*, allowing for compound interest. Then taking the rent of the land at 5 *s.* an acre and putting that also at compound interest, that would make 23 *l.* 15 *s.*, or a total of 43 *l.* an acre as against a crop worth 80 *l.* or 90 *l.* per acre.

2075. That does not include thinning, does it?—I allow the thinnings to cover the cost of keeping the fences in order, and all the things of that kind.

2076. With regard to that disease which you have spoken of, is that a disease which leaves a white scaly substance upon the bark?—Yes, it is like flour dust upon the branches, and if you examine it with a microscope you see it is a small insect.

2077. Is it an aphis?—No, it is a kind of beetle; I have forgotten the scientific name of it; I think it is a chermes; you find it in three stages of growth upon the same leaves, and you will find hundreds of them upon a single leaf of larch.

2078. Do the larvæ eat the leaf?—Yes, they suck all the juice out of the leaf, and that causes the branch to wither. And then, I believe, although this has not been absolutely proved, they hibernate under the bark of the tree in a chrysalis form. You find the bark bulges out and the turpentine exudes, where the second year's growth begins, and then the tree gradually dies.

2079. I suppose that a considerable amount of this disease may exist upon a larch without materially affecting its growth?—Yes, and I think that a great deal of its ravages are due to the want of proper attention to the plantation. Plantations are allowed to get too crowded, and and it is just like a disease breaking out in a thickly-populated district.

2080. You think that the disease probably comes from the larch being planted too thickly?—Yes, or rather from their being left to grow too thickly after they are planted. The planting them thickly at first would not matter if they were cut out afterwards; it is leaving too little circulation of air between the trees that makes them become sickly, and then they succumb the more readily to the disease; whereas a strong and healthy tree, as I have seen in my own experience, will not succumb in the same place where other more sickly trees do.

2081. How soon after planting would the first thinning take place?—It depends upon how closely they are planted.

2082. Taking them at 4,000 to the acre, for example?—That would be about four feet apart; we should only plant them in an exposed situation in that way, and the first thinning should occur about ten years after the planting.

2083. You say that the *Abies Douglasii* is not subject to the disease?—Not so far as I have observed.

2984. Have you any experience of the value of the timber of that tree when it is full grown?—Only in America. There is no full-grown *Douglasii* in this country.

2085. At what age do you consider the *Douglasii* reaches its maturity?—It is difficult to say.

Mr. *Rankin*—continued.

say. I have seen them growing 200 feet high, and as much as six to seven feet in diameter. Those trees may have taken 200 or 300 years to grow.

2086. Have you examined the rings of those trees?—Yes, and I have counted upwards of 200.

2087. Do you think in this country it would grow to be a good tree in 40 or 50 years?—Yes. The largest tree I have seen of that kind is at Powis Castle, in Lord Powis's park, and, speaking from memory, I should say that that tree would be three feet in diameter.

2088. Is it not a fact that some larches about 30 or 40 years old have a tendency to split at the head?—Yes.

2089. Do you know anything of the *picea Nordmanniana*?—Yes.

2090. Is that a good tree?—I have never seen them as timber trees. I do not think the timber would be valuable.

2091. Or the *picea macrocarpa*?—I know them simply as ornamental pines: I have never seen them as timber trees. But I have seen some species of cupressus growing in California which make very excellent timber, and I have also seen in Florida another species of the cypress.

Mr. *Charles Acland.*

2092. Did I rightly understand you to say that you thought that planting in England was very much discouraged by the unfairness of the railway rates, as between home-grown and foreign timber?—Yes.

2093. You said that you could send timber landed at Hartlepool from there to Llanidloes for the same rate that you could send it from Llanidloes for only half the distance?—Yes; I could only send British timber half the distance.

2094. I suppose that has to do with the whole system of through rates, has it not?—Yes; I think there is a preferential rate given to Hartlepool. I think that the North Eastern Railway Company have been anxious to develope that port, and have given it exceptionally low rates.

2095. You would not say that English timber landed at Hartlepool would not come at the same rate from Hartlepool as foreign timber landed at Hartlepool?—I cannot say that. If we were to send timber back from Llanidloes to Hartlepool the rate would be very much greater.

2096. Exactly; but that is because there is no competition that way; the public must get the benefit of competition, must they not?—Yes.

2097. I understood you to speak with considerable disapproval of the system we adopt in this country of rating woodlands; you seem to think that woods should not be rated?—I do, certainly.

2098. Why should not woods be rated just as much as other lands?—Because I think that it is the interest of the country to encourage the growth of timber. There will eventually be a great scarcity of timber, and it is the interest of

Mr. *Charles Acland*—continued.

the country to encourage the growth of timber. Timber is not reproductive for many years after planting, so that the proprietor is going on making payments for a profit which will only occur at a distant date.

2099. I do not see how we can distinguish between encouraging the growth of timber and encouraging the growth of anything else?—I am not able to speak to that. I can only say that in America they exempt all land from taxation if it is planted, and they give a bounty for planting in certain States. The Government do all they can to encourage the planting of timber, but I am sorry to say that very little is done in the way of planting.

2100. They do not require planting so much, I suppose, in America?—They have a large source of supply there. I have a book here with charts illustrating the amount of timber in different parts. A calculation has been made, and it is estimated that the value of the crop of timber for the year 1880 was 700,000,000 dollars.

2101. Do you think that our want of knowledge of forestry has to do with our not planting sufficient timber in England?—I think that there has been a great deal of injudicious planting from the want of knowledge of trees suitable to the soil, and there has been a great deal of neglect in the management of timber. I have seen many estates in England where the timber is grossly mismanaged, and where an immense loss occurs to the owner through the want of a proper knowledge of forestry.

2102. For the purpose of supplying that knowledge, you say that you are prepared to endorse Mr. Julian Rogers' evidence?—I certainly think it is desirable to have a school of forestry. I think we are almost the only country in Europe that has not a school. Even in Spain, where very little timber is grown, they have a school of forestry.

2103. The knowledge you would wish to impart at such a school would be chiefly knowledge on the part of those who have the management of woods, and those who work in them?—Yes; those who have the management.

2104. You do not think that it is necessary to institute a school for teaching the practical treatment of woods, but merely a large theoretical knowledge?—Yes, I think that is what is wanted at the present time. I think as regard the other part, as Mr. Clutton observed, you would get a workmen in a district he is accustomed to. It is useless taking a man from the south of England, and putting him into a wood in Wales; the management in the south of England totally differs from what it is in Wales.

2105. For the management of woods that man must trust to practical knowledge gained upon the spot?—Yes, where he is working.

2106. But botanical, scientific, and geological facts can be taught in the school of forestry?—Yes.

2107. And for that purpose, do you think that we ought to establish a national school?—I think so.

Sir *John Lubbock.*

2108. As regards the question of rating woodlands, we have had it in evidence that judicious planting gives a considerable amount of shelter, and also benefits all the district around; would that be a reason for treating woodland differently in the matter of rating from arable or pasture land?—The advantage gained by shelter would show itself in the increased value of the arable and pasture land, and the increased rating should come in there. For instance, I have planted a very large extent of land in Devonshire, and also in Wales, for shelter. To give shelter has been the main object of planting there, because it was too high to expect timber to grow profitably; I consider in many cases the value of the shelter has been equivalent to 2 *s.* 6 *d.* an acre upon the whole land; that is, it would increase the rating value of the land round it by 2 *s.* 6 *d.* That is one reason why land which is planted should be exempted from rating, because the rateable value of the adjacent land would be increased.

Mr. *Rankin.*

2109. But do you think that a proprietor who had land, we will say, in pasture adjoining a tract planted by his neighbour, would he be quite satisfied if, on account of the land having been planted, he was rated 2 *s.* 6 *d.* extra per acre for his land?—If the land was worth it, I think he should be.

2110. I think that there would be some opposition upon that score, would there not?—He could not oppose if it was proved that he did let the land at so much more per acre; that is what the rating is based upon.

2111. Would not that fact give rise to enormous opposition to letting lands planted go free?—Probably there would be opposition. It is difficult to say what the opposition would be; but I think it would be an advantage to the country that land planted should be exempted from rating.

Sir *John Lubbock.*

2112. It is only quite recently that planted lands have been rated, is it not?—Quite recently. It gives a very great deal of trouble, and many persons submit to an excessive rating rather than go to the trouble of appealing against it.

Chairman.

2113. Do you know of any country where the rating of woodlands prevails?—No.

2114. It does not prevail in America?—No; the system of taxation is different. I should think it would be quite right that the rate should be paid upon the timber when it was cut, and it is so now; but it is contrary to national interests that woodlands should be rated.

Sir *John Lubbock.*

2115. It always was the case, was it not, that there were rates upon timber when it was cut?—Yes.

Mr. *Fuller Maitland.*

2116. Do you think that before woodlands were rated there was a larger amount of planting than since?—It would be a very difficult thing to say, but I am sure of this: that the rate has had a deterrent influence upon planting. I am certain, from my own knowledge, that the very fact that woodlands would be liable to be rated has deterred people from planting so extensively as they otherwise would have done.

Mr. *Fuller Maitland*—continued.

2117. Do you know a large portion of Wales pretty well?—Yes.

2118. Is it your opinion that there is a large quantity of land suitable for planting, which is unplanted at present?—Yes; there is probably a larger area of unplanted land in Wales that would pay for planting than in any other portion of the kingdom.

2119. What are the causes that have interfered with the planting of those lands?—At the present time the low price of timber, the scarcity of money, and the prevalence of the larch disease, I should say, are the principal causes.

2120. I think the larch disease began about the year 1879, which was a very wet season, did it not?—I observed it before then, but since then I think it has been worse. Last year we had very little damage from it.

2121. For 20 or 30 years before the visitation of the disease, was it not the case that more planting was done in Wales than had been done previously?—Yes; there has been a great deal of planting done within the last 20 years in Wales. On two estates within the last 15 years we have planted over 1,000 acres.

2122. Since the appearance of the larch disease, do you think that the inclination to plant has fallen off?—To a great extent; but we have on some properties been planting *Abies Douglasii* 18 feet apart, and in the case of high uplands Scotch firs, so as to meet the difficulty in the event of the larch disease occurring.

2123. Do you know whether the larch disease is common in the forests in Germany?—I have not observed it in the forests in Germany; I have not been there of late years. But you find it worse in plantations that have been neglected from the want of opening the gutters and getting rid of the rainfall where water lodges in damp hollows; probably it is from the same reason that I stated before that the tree is not growing in such a healthy condition, and is therefore more likely to succumb.

2124. Do you believe that the disease is caused by the mismanagement of the planted land?—I would not say that. The disease has occurred in the best-managed plantations, but I think the effects of it may be very greatly mitigated by judicious management.

2125. Do you think that it is due to bad seed?—No; it is due to an insect that deposits the eggs. There is a little fly that comes in the spring of the year and deposits the eggs upon the larch. There is no doubt about that.

2126. You think that it is nothing in the plant itself that causes it?—No.

2127. It comes from the outside?—Yes.

2128. Did you ever know of any visitation of the disease before that of the last few years?—I first observed it about 20 years ago.

2129. You

Mr. *Fuller Maitland*—continued.

2129. You spoke just now about the bad price of larch timber; is not it the case that in Wales, now, if you have a good plantation of larch, you can find a ready sale for it at a price that is profitable?—No; I am now valuing a plantation of larch in Brecknockshire of about 50 years old, and I am afraid we shall have little or no demand for the timber.

2130. Larch of that size would be suitable for telegraph posts, would it not?—Yes.

2131. It is for that purpose that it is sold, I believe?—It is sold for railway sleepers and for telegraph poles, and the points for railway fencing and things of that kind. And a great deal would be sold for pit wood; but at present they are selling French pit wood at 15 *s.* a ton from a pine which is grown extensively on the coast of France.

2132. You know Montgomeryshire, do you not?—Yes.

2133. Is it not the case that there are large quantities of oak and ash growing there?—There has been a large quantity of both oak and ash growing there, but the quantity now growing is very small.

2134. If attention was paid to the cultivation of these trees of ash and oak in that part of the country, the woods could be made very remunerative, could they not?—I think that the planting of ash might be productive and made to pay within a person's lifetime; but as to oak, no one will plant oak, because it is not remunerative until generations after planting, and therefore the planting of oak would have to be undertaken by Government.

2135. Is it not the case that there are large quantities of unenclosed woods where, if plantations were made, the trees would naturally seed and others would grow?—Yes.

2136. But from the fact that those woods are unenclosed, cattle get in?—Yes, cattle get in and kill the young shoots. But that is more so in Brecknockshire. In Montgomeryshire we have the woods more carefully fenced in. That would be one of the advantages of instruction in forestry, that people would understand that injury to the trees occurs not only from the cattle browsing the tops of the trees, but from the animals rubbing against the trees, and the grease from their bodies getting into the bark of the trees and preventing the sap flowing up the tree. People think that if the top of the tree has grown out of the reach of the cattle, they do not harm it, but it is a great mistake to suppose that no injury is done by their rubbing against it as I have described.

2137. You have been a great deal in America, I understand; is it the case that in America the study of forestry is made a matter of great importance?—No.

2138. Still, I understand you to say that inducements are given by the Government to the formation of plantations?—Yes, especially in Nebraska, which is in a comparatively treeless state; strong inducements are held out by the Government to plant. They have now a day called Arbor Day, when every person is supposed to plant some trees.

Mr. *Fuller Maitland*—continued.

2139. That is optional, however?—Yes; and it is done only to a very limited extent.

Dr. *Farquharson.*

2140. When you say that wood can be grown at a profit, do you mean that it can be grown at a present profit or that it may be planted now with a view to a profit in the future?—I mean that it may be planted now with a view to a profit in the future.

2141. With regard to what you said as to the bad price of wood, I may take it that the wood that you are cutting now has not been a very remunerative speculation to the landed proprietor?—No; that is as to certain classes of woods. The thinning of plantations of young oaks and Scotch firs and spruce we can hardly sell at any price.

2142. We have had it in evidence that the only tree in which we can hope to compete against the foreigner is the larch. I understand that the larch will hold its own?—I think that is so. The larch is very valuable timber, but I myself have a very great faith in the Douglas pine, the *Abies Douglasii.*

2143. That faith is rather theoretical, is it not?—It is not theoretical as regards the growth of it in this country. I planted some of the Douglas pine about 20 years ago, and I cut some of them down last year, and there was a great deal of heart found in it; I have not, however, tried it sufficiently to know how it would last.

2144. Then you are in a position to say that it is a wood that is likely to be a profitable wood in the future?—I think so, decidedly.

2145. It grows rapidly, but it is expensive to plant, is it not?—It is expensive to plant, and I think unreasonably so. I have bought some from a person in the south of England at a very reasonable price, but the ordinary nurseryman's price is excessive, taking into consideration the fact that it is an easy tree to propagate and easy to grow. It is not, however, adapted to planting in exposed situations; it is liable to the loss of its leaders.

2146. Your estimate as to the future profits of planting depends, as I understand, upon a number of conditions; the first condition is, that the foreign competition should be diminished?—Yes.

2147. And one reason why you thought that foreign competition would diminish, as I understand, was that they were not paying much attention to the woodlands in America, and that therefore the stock was falling off?—They are not planting in America, but the Government there are paying a great deal more attention to forests than we are in England. I have here reports which I shall be happy to leave for the inspection of the Committee, and maps of the different districts in America, which are very exhaustive. They have calculated the areas and the quantity of wood produced, and have gone carefully into the quantities of timber, and what timber is the best suited, and questions of that sort.

2148. Is not it a source of great danger to us if they attend more to their woodlands in Canada and in America than we do, and so send greater

Dr. *Farquharson*—continued.

supplies of wood to compete with our woodlands here?—Yes; but so far it is all theoretical. Practically the only care taken on the part of the Government is to prevent the timber being stolen, and to try to prevent forest fires. A great deal of land is set on fire by persons who have the grazing of it merely to improve the pasturage. I have myself seen large tracts of land that have been fired merely to get a little more of the scanty pasturage.

2149. Is the management of the woodlands in America worse now than it was formerly?—No, I should say not; if anything it is better. But there is hardly any attention given to the management of woods, further than cutting them down, so far as actually has come under my attention; although I have read that a great deal of attention is paid to the matter.

2150. As a matter of fact, however, in America they have a vast quantity of wood of a better quality than ours which effectually competes with our wood; does not that pretty clearly show that further attention to the subject of forestry is not necessary in America?—As I have already stated, I believe the price of timber in New York is higher than it is in England. Our company in West Virginia send a large quantity of timber to Richmond, New York, and other places, and the price in New York must be higher than that at which timber is sold here.

2151. Is that on account of the high railway rates in America?—No; the railway rates in America are very much less than they are here. As I said, we can send timber from West Virginia to New York, which is a distance of nearly 700 miles, for about the same cost as we could send it in this country for a distance of 150 miles.

2152. Do you think there is any chance of the larch disease dying away?—I think so. I have much greater faith in that than I had last year, we had so little injury done last year by it.

2153. Have you any idea as to where the disease came from first?—Not the least.

2154. You do not think that it has anything to do with bad seed?—No, it is an insect.

2155. But the germ of the insect might be contained in the seed, might it not?—I should hardly think that would be probable in this case. I could not say positively, but taking the nature of the insect, I do not think that it is likely. The perfect insect seems to be a fly.

2156. In the disease of the silkworm, was it not the case that the germ of the disease was found in the egg, and the disease could not be checked until healthy eggs were procured; might it not be the same here?—I have no knowledge of that.

2157. Do you think that the disease has anything to do with the planting of the larch in unsuitable soil?—Yes, I think so.

2158. And in land of inferior quality?—Yes, in damp wet land I think; a great number of larch trees have died owing to that; and you will also find that trees above a certain growth are not subject to disease. It is very rarely that you will find trees of above 20 years' growth affected by it; if you get them over that age the tree is practically safe.

Dr. *Farquharson*—continued.

2159. You were in favour, I think, of having a central school in London?—Yes.

2160. Is it not a cumbrous way for a land agent to learn his business if he has first to go to Cirencester to learn agriculture, and then to London, to learn forestry; do you not think it would be better to combine the learning of agriculture and forestry in one school?—I think there are so many students that do not go to Cirencester, or to any of those colleges, that it would be attended with very great expense if they were sent there; whereas if the school was established in London, they could attend the lectures on forestry, and also attend lectures on other subjects; for instance, they could attend lectures in connection with passing the examination at the Institution of Surveyors.

2161. Do you think that they could take the whole of their professional education in London, not excepting forestry?—I think that London would be the best place at present. I think, eventually, there should be off-shoots in Scotland and Ireland, but I should commence with a central school in London.

2162. Where would the students get their practical instruction in London?—I should take them out to the New Forest, or some other district for inspection and instruction in a practical knowledge of the woods.

2163. Have you formed any estimate of what the length or the cost of a course of that kind would be?—I have not, but I think that the course need not be a long one, because a person coming to London might be presumed to have a certain amount of elementary knowledge before he came, and I think that a course of one year would be sufficient for the purpose.

2164. Would it be possible to establish at some of our large forests a kind of theoretical school where young men might get a certain amount of theoretical instruction which they could carry out in practice in the woods and plantations in the neighbourhood?—The theoretical school need not be in the neighbourhood of a forest, but for practical instruction there should be a forest within reach.

2165. When you say that you think that forestry should be taught in Board schools, I presume you mean it should be taught as an extra subject?—I mean that the rudimentary principles should be taught at Board schools, such as entomology and botany. I think they might be advantageously taught, certainly.

2166. Would you propose that they should be taught as extra or as part of the regular subjects?—I think as part of the regular subjects. I think they would be far more useful than teaching them many of the subjects that are taught at Board schools. I certainly would have all rural schools teach the children the rudiments of botany.

2167. You might have a sort of extra class in which young men might learn the special subjects?—Possibly that might be done.

Mr. *Evelyn.*

2168. You consider that a National School of Forestry, if established, would be very beneficial by teaching people better the right principles of managing

Mr. *Evelyn*—continued.

managing their woodlands, and you consider that the encouragement of planting deserves the special aid of the State more than the growth of cereals, for instance; because, I presume, the profit of cereals is immediate, whereas in timber the profit may be so remote that private individuals shrink from planting some of the most valuable kind of timber; is not that the case?—That is so.

2169. Do I rightly understand you to say that England pays less attention to the custody of her woodlands than any other country?—That is my opinion from what I have read.

2170. In America are any means taken to prevent the rapid denudation of forests that is going on?—Means are being taken now in America to prevent the destruction of forests by fires, but not the denudation of forests.

2171. Are those fires ever from natural causes?—Yes, occasionally.

2172. But they are generally through people setting fire to the trees, are they not?—Yes; there are careful tables prepared, showing what the causes of all these fires were; and, as I mentioned, about 10,000,000 acres of forest were destroyed in 1880.

2173. One question with regard to the *Douglasii* pine; can you tell me when it was introduced into this country?—I should say it would probably be about 50 years ago, but that would be merely a guess. It was named after Douglas, one of the explorers, who first discovered it in British Columbia, where there are immense forests of it.

2174. The tree in Lord Powis's park is three feet in diameter, you say?—I think so, speaking from memory.

Mr. *Evelyn*—continued.

2175. Do you know when it was planted?—I should judge that it must have been planted about 40 years.

2176. Do you know the height of it?—I should think (I am speaking quite from memory) that it is about 50 feet.

2177. Do you consider that the *Douglasii* is likely to be a very valuable timber in the future?—I think so, if planted in suitable places, where there is sufficient depth of alluvial soil. It would not do to plant in a thin rocky soil, where larch will grow. Where there is a moderate shelter I think the *Douglasii* is the pine of the future.

2178. Do you know whether, in France, they take great care of the conservation of woodlands?—I have noticed some of the French and German forests, but the system pursued there seems to be very different from what it is here. They leave the trees growing thickly together for a number of years, and rely upon natural selection, and then they thin them out, leaving the best naturally developed trees. They are also very particular, especially in Germany, in growing the timber so as to have few branches on, and then leaving the trees to shoot up. But the climatic conditions are different there, and I do not think that the same system would be applicable here.

2179. Do you know whether in Germany there is any legislation for the protection of woodlands?—Yes, in Germany there is very strict legislation indeed. For instance, a person cannot clear his land. If a person disafforests any portion of his land he is bound to let it be re-afforested.

2180. Is that also the case in France?—I have read about the laws there, but I do not remember them distinctly.

Sir JOSEPH DALTON HOOKER, M.D., C.B., called in; and Examined.

Sir *John Lubbock.*

2181. I NEED hardly ask you, you were for many years Director of the Royal Gardens, Kew?—I was.

2182. And you have had great experience in the management of trees, have you not?—I could hardly say that; I have had experience of ornamental planting.

2183. I believe you have also visited many forests in different parts of the world?—I have, but not as a forester.

2184. Have you formed any opinion which you would communicate to the Committee as to the present condition of woodlands in this country?—I have observed that they are very much neglected, but then it must be remembered that it is very difficult to judge between what are planted as mere shelter and what are planted for woodland purposes. As a rule, those which are planted chiefly for shelter are entirely neglected, and are not looked upon as a source of profit; whereas woodland and copse woods, if grown for profit, are in quite a different position.

2185. Do you consider that the establishment of a school of forestry in some form or other would be advantageous to the owners of woodlands in this country?—I think that an establish-

Sir *John Lubbock*—continued.

ment teaching forestry would be exceedingly useful, but I am not prepared to say that I should advocate the establishment at once of a school of forestry proper in addition to that at Cooper's Hill.

2186. Would you favour the Committee with your views as to what would be the best mode of developing the teaching of forestry?—I can hardly say that I have considered the matter, except with reference to India and the Colonies, which I have been consulted about; but my impression is that the best plan would be to take advantage of the existing institutions as far as possible. At Cooper's Hill there is an amount of first-class teaching of forestry for certain purposes, and it is a great pity that that first-class teaching should not be utilised as far as it goes more for general purposes. Nor do I see why the agricultural colleges should not be taken advantage of. It is a great pity that the teaching of agriculture and sylviculture should be entirely dissociated.

2187. You would rather, as I understand, introduce the study of forestry at the existing institutions than found an independent school of forestry?—Yes; I would do this as a tentative

Sir *John Lubbock*—continued.

process, and if it succeeded it would then be the time to consider the expediency of forming a second school of forestry proper.

2188. Has your attention been directed to the evidence given by Colonel Pearson before this Committee last year?—Only to those portions which you pointed out to me to-day.

2189. You have not, perhaps, had time to form an opinion upon his evidence?—I was already familiar with what you had pointed out to me as regards Colonel Pearson's recommendations, because I was consulted about the formation of the teaching establishment at Cooper's Hill.

2190. Will you tell us how far you concur with the evidence of Colonel Pearson?—Generally, I may say I entirely concur. I think that Cooper's Hill might be taken advantage of with very great benefit.

2191. Are you acquainted with the system which is pursued at the Agricultural College at Cirencester?—I am not.

2192. I gather from your previous answers that, without expressing a distinct opinion upon that subject, you would rather lean to the idea that instruction in forestry might be introduced with advantage at Cirencester also?—Yes; I think that would be very useful in many ways. Many of the agricultural students would very probably have to act more or less as foresters, and it would be a great pity that they should have to go to another special forestry school to learn much of what they might have learned during their stay at an agricultural college like Cirencester.

2193. Would you endeavour, at first at all events, to localise the study of forestry so as to bring together all those who desire to take up the study of forestry?—I think there are certain institutions to which forestry students would naturally like to go. For instance, such places as the Scottish universities, and Cirencester, and Downton, because of the other information which they might obtain there, and which information would bear upon forestry.

2194. My question was rather, do you think that there would be so many students of forestry, at first at all events, that it would be desirable to introduce special instruction in forestry at several centres; or do you think it would be better to begin by selecting some one institution for that purpose?—I am not quite prepared to answer that question; but my impression is that there would be difficulty in getting Scotch students to come all the way up to London, or to Cirencester, or to Cooper's Hill; but that is a question of expediency upon which I could hardly give an answer. As regards England, I think there would be no material difficulty in students proceeding to Cirencester.

2195. Then I may take it that as regards England you think it would be better to try to select some one institution, not necessarily a new one, for the purpose of teaching forestry?—I think so. But there is a reason why Scotch students might prefer the teaching in Scotland, and that is because the forests of Scotland are in so many respects different from those of England.

2196. But as regards England you think it would be better to endeavour to keep all the

Sir *John Lubbock*—continued.

students of forestry at some one institution, in the first instance, at any rate?—I think so.

2197. As I understand, you would recommend the Committee, on the whole, to adopt the suggestion which was thrown out by Colonel Pearson?—Yes, I think so, having regard to the provisions he makes for land agents, and bailiffs, and so forth.

Mr. *Charles Acland.*

2198. I suppose that what you have said has reference to the training of managers and land agents?—Yes; but I would even throw all the teaching open to persons of a lower grade, because you often have exceedingly able young men who are not land agents, but who would rise to be land agents if they had the facilities and encouragement which such a training would give.

2199. You imagine, I presume, that they would try to get the diplomas?—Yes.

2200. But they would not, I presume, necessarily go in for the wider training which such a college would give?—Not necessarily; but I think that very likely young men of ability would go in for the wider training after commencing the other, and that is the reason why I think that advantage should be taken of a place which has the best means of teaching, which I assume would be Cooper's Hill for a long time to come.

2201. Rather than Downton and Cirencester, as I understand?—Yes. One reason why I should recommend some teaching of forestry at Downton and Cirencester is because I think agriculture and forestry should not be dissociated.

2202. Do you think that there is sufficient opportunity of practical instruction in forestry at Cooper's Hill?—I do not think there is now, but I think there might be. Under any circumstances that is a necessity.

2203. Do you think that we ought to ask the Government to endow a professor, or to contribute to the establishment of a class of forestry at Cooper's Hill?—There is one there already.

2204. That is only for India, is it not?—Yes, primarily, but the instruction given for India would be very useful for land agents generally; and, as was recommended in Colonel Pearson's Report, and which I approve of, shorter courses might be given at the same place for such land agents and bailiffs as would not go through the whole course of study.

2205. Do you think that anything could be done at Kew in connection with such classes?—I think that the elementary training in botany and also instruction on all such matters as diseases of timber and so on, could be arranged for there. Furthermore, I believe that there is forming at Kew a large collection of instructive specimens illustrating injuries to timber produced by fungi, insects, &c.; and a study of such is essential to a sound forestry education.

2206. Would it be possible, in your opinion, to combine that training with the Cooper's Hill classes?—So far as botany is concerned I believe that it is already arranged that the students at Cooper's Hill will have some instruction in botany in the museums and gardens at Kew, and this would be supplemented by the good timber collection which has been got up at Kew.

2207. Your

Dr. *Farquharson.*

2207. Your view, as I understand, is that the existing institutions should be profitably utilised for the study of forestry?—That is the first step, I think. If there was thereafter found to be a great demand for the study of forestry, it would then be a question whether a forestry school other than Cooper's Hill should not be established.

2208. Is it not rather a cumbrous plan for a land agent first to have to go to the Agricultural College at Cirencester to get his agricultural training, and then to come up to London to get his forestry training in another place?—Yes.

2209. Would it not be more convenient in your view to have the two things taught in the same institution?—Yes.

2210. In your opinion is much theoretical instruction necessary to a student in forestry?—I think that a sound elementary acquaintance with five or six branches of science would be very useful, but not more than a young man could pick up at such a course of instruction as I should contemplate, and as is, I believe, to be obtained at the Agricultural Colleges.

2211. What branches of science would you suggest he should be acquainted with?—I should say meteorology especially; and the organs and tissues of plants, physiological botany, geology, and elementary chemistry.

2212. You would recommend that, I presume, only for a man of good emoluments who was going to take a good position?—It would be necessary for him, but it would be useful for all. I should be inclined to have the instruction so arranged that all classes might have an opportunity of obtaining some acquaintance with the different branches of science concerned in forestry, so that if a gentleman wished to send a young lad of ability, however poor he might be, to study forestry, he might go through the elementary courses first, and then, if he proved competent, he might go up for the higher and fuller curriculum.

2213. You think that it would be necessary to have a regular curriculum?—There is a regular curriculum for India and the Colonies, and I think such a one should answer for land agents.

2214. You do not think it would be enough to have merely an examining board?—An examining board is one thing, and a curriculum is quite another. The curriculum provides for a regular and continuous course of study. As to the Examining Board, I am not prepared to say what would be the best composition for such a board.

2215. The difficulty connected with this matter in Scotland is that our foresters are quite small men, who are paid 1 *l.* or 30 *s.* a week, and the great desideratum in their case is to get some kind of training which they can get through in some three or four months?—Yes, I am aware of that difficulty, and that is the reason why I have suggested that there should be elementary courses at Edinburgh, Glasgow, Aberdeen, and St. Andrew's, or in perhaps two out of the four Scotch universities.

2216. What, in your opinion, is the shortest course from which such a man could really get advantage?—I should say three months. Of course, six months would be better.

2217. You think that a course of three months' training would be long enough to give a man sufficient theoretical instruction to enable him to usefully apply his knowledge in the management of woodland?—Yes, and to enable him to go on afterwards with books. It would put him in training for future progress on his own part. It would give him scientific methods of study, and then he could go on by himself afterwards.

Dr. *Farquharson*—continued.

2218. That, I suppose, might be quite a cheap course?—Yes, the great expense would be having to live in Edinburgh or in Glasgow, or wherever it might be; but that is what as poor students of other subjects are doing now in Scotland.

2219. And Scotch students, as a rule, are very frugal, are they not?—Certainly.

Mr. *Egerton Hubbard.*

2220. Are there any trees which are not usually grown in England now, but which in your opinion could be grown at a profit in this country?—I have thought over that matter a great deal, and I cannot say for certain that I know of any that could be. The growth of such trees is so different in this country from what it is in their native country. Taking, for example, the larch disease which has been spoken of here this morning: I remember the larch disease 40 years ago as existing then, though not to the same extent. We are growing the larch now in a climate which is totally different from its native climate. It is an eastern tree, it begins in the Tyrol, and extends eastward into Eastern Siberia; it is not really a western tree at all. We are now growing it here in a climate which is not the true climate of the larch.

2221. Do you think that we could grow the Corsican pine, the *pinus laricio*, at a profit in this country?—I do not see why we should not, it is a very good wood; but it grows much more rapidly here than it does in Corsica. It does not, however, follow that because the wood is good in Corsica it will be so in Britain. If you take a section of the *pinus laricio* grown here, and a section of it as grown in Corsica, and compare the two, you will find that there is a considerable difference in the wood.

2222. I have been told that that wood, the Corsican pine, is used in the French navy for the masts of men-of-war, but it is never mentioned in any of the specifications, I understand; can you tell me why that should be so; is it because there are no Corsican pines large enough?—The larger masts now-a-day are all built, if they are not made of iron. Built masts are considered better and stronger than solid timber ones; and since we imported New Zealand pine we have never, I believe, had any solid timber masts of very large size; the largest masts are, I am told, all now built.

2223. Have you any experience of the Douglas pine grown in masses in this country?—I have seen a great deal of the Douglas pine; it has been in this country I may say for 60 or 70 years. I have taken sections of the Douglas pine grown in this country, and compared it with others grown in America, and the difference is so enormous that I cannot suppose that the wood of the Douglas pine of this country will ever be equal to that grown in Vancouver. If my memory serves me, I have found five annual rings in Vancouver-grown specimens to one of trees grown in this country. The same may be said with regard to the growth of the cedar of Lebanon; in its native country, where it only grows

Mr. *Egerton Hubbard*—continued.

four or five months of the year, its timber is close-grained, hard, and durable ; whereas the wood of English-grown trees is valueless.

2224. May I take it that in your opinion many trees grow too quickly in this country ?—Yes, the northern ones and those from drier climates.

Chairman.

2225. I believe that Mr. Thistleton Dyer is at present abroad, but I believe you have conferred with him upon this subject; are you aware whether he concurs with you in the views you hav expressed here to-day?—I think so. We hae not talked over the subject for some time; but, so far as I recollect, his views are much the same as my own.

Dr. *Farquharson.*

2226. You spoke just now about the larch growing in this country in quite a different climate to that to which it is accustomed?—Yes.

2227. Do you think that has anything to do with the development of larch disease, of which we have heard so much ?—I think that is quite probable. That disease might have a much more rapid development in a moist climate like Great Britain than in Eastern Europe or Siberia.

2228. That does not hold out a very encouraging prospect for the future of the larch in this country?—It does not.

2229. Do you think that the disease has anything to do with the seed?—No, it is outside it altogether.

Sir *John Lubbock.*

2230. Of course the education of foresters who are intended for the Indian service, or for the Colonies, would be carried much further than that for woodreeves or land agents?—Certainly.

2231. But there would be a great deal that is common to the two courses, would there not?—Yes, all the elementary principles would be common to the two.

2232. Therefore, the Government having already established a course of instruction for the higher order, that establishment might be utilised for the instruction of men who did not intend to carry the matter so far?—That is my view.

Chairman.

2233. Among some of those who have come here to give evidence, particularly those representing land agents, and the landed profession generally, there is an opinion that it would not be so absolutely necessary for woodreeves and bailiffs to go to a school of forestry if there was a school where the land agents could be instructed, because the land agents would then be able to communicate the information they had received to the woodreeves and bailiffs under them; would you agree with that opinion?—I should doubt whether they could communicate it sufficiently scientifically. It would be a great advantage, no doubt, that they should have the knowledge, but still I think it is the training in scientific methods that the men get in a college or a school that would be specially important to them.

2234. Landowners in these days would hardly be likely to pay the expense of a man going away from the land for three months, or six months, or twelve months, as the case might be?—No, it is a money question throughout, no doubt.

2235. Whereas a land agent would willingly go for instruction to a school which would probably enable him to get a higher position?—Yes, and also for the certificate which he might thus obtain.

Dr. *Farquharson.*

2236. Probably a man who had had a three months' course would have a better chance of getting a place than one who had not had that advantage?—Yes, it would give an opportunity to a man who had not intended to go into the higher branches of proceeding onward to these. He might show ability at the lectures which he would be obliged to attend, and that might lead to his being encouraged and helped to go on to the higher branches.

Sir *John Lubbock.*

2237. As I understand, you consider that although a land agent himself might give a certain amount of instruction to the woodreeves under him in scientific subjects, which would be better than nothing, that would not be nearly so good as the instruction which the men would get from three or six months' residence at a college?—It would not compare with it.

Reverend JOHN CRUMBIE BROWN, LL.D., called in; and Examined.

Chairman.

2238. I BELIEVE you are the author of a well-known work on the science of forestry?—Of several.

2239. And you have given considerable attention to the subject, I believe?—I have given a great deal of attention to the subject for the last 10 years.

2240. And you have already given evidence before this Committee?—Yes ; I was examined last year.

2241. You have had considerable experience, have you not, in schools of forestry on the Continent?—Yes ; I have visited most of the schools

Chairman—continued.

of forestry, and have had correspondence with the managers of all those which I have not visited personally.

2242. Which of the foreign forestry schools with which you are acquainted would you consider the best model for one in Great Britain?—The question was put to me last year, and on the spur of the moment I answered "Spain"; continued consideration of the subject satisfies me that Spain is decidedly the best model for a school.

2243. Is the school in Spain an independent school of forestry?—It is an independent school of

Chairman—continued.

of forestry, supported by the State, at the Escurial.

2244. Not connected with agriculture?—Not connected with agriculture.

2245. What does the staff consist of?—In round numbers I should say ten professors and a principal, and ten assistants.

2246. Of what class of men are the students principally?—They are equal to those who go to the university. They have gone through a preliminary training in the schools which would have fitted them for a university course if they had chosen to go there.

2247. And do they go out afterwards as forest managers?—They can at once have an appointment by the Government, or they may be employed by private proprietors. They prefer the Government appointments.

2248. Have you any idea of what the expense of the course of instruction there is?—There is this difficulty in taking the cost of instruction at the schools on the Continent, that in many cases the school-house which may be a palace is given free. In almost all cases the teachers hold Government appointments as foresters, and have a gratuity in addition to their regular pay; in Spain the addition runs from 60 to 100 guineas over and above their pay. It is only the superior officers of the forest engineers who get the higher appointments. It is not in that respect, however, that I recommend Spain as a model; it is more the perfect freedom and liberal course of study that is followed there that I recommend it for.

2249. Are there forests in the immediate neighbourhood of the school in Spain?—There are in the Guadarrama; but they do not attach great importance to having forests in the immediate neighbourhood of the school. In common with all the advanced foresters on the Continent, they say that is a matter of very little importance. They take the students to the forests that they may see what is being done, and that there the professors may explain what has been said in the lectures, illustrating this by what the students see going on in the woods.

2250. Have they any nursery?—They have a small nursery, but the different students are not required to engage in nursery operations; the nursery is very limited.

2251. Have they a museum?—They have a museum.

2252. Where they have collections of various specimens, I suppose?—Yes, collections of everything connected with forestry, forest products, and the produce of forest industry, the implements that are employed in forest management, and mechanical, hydrostatic, hydraulic, and other illustrations of physical science.

2253. And besides the students of the class you describe, are there any of a subordinate class corresponding to our woodreeves?—Not there. They attempted an inferior school elsewhere, but it was found not to be successful. It was found better to entrust the training of workmen employed to the highly educated and trained students who had left the school.

2254. In your opinion, after well considering the subject, do you think that the very best principle to adopt in the event of any school being established, is to endeavour to instruct, as far as possible, scientifically the land agents who have charge of the woods, and leave it to them to instruct, so far as they can, their subordinates, namely, the woodreeves, bailiffs, and working men, under their charge?—I am not prepared to say that. What I admire in Spain is, that instead of just going on in the rut they have adapted the training to the requirements of the country, and we too should adapt our training to the requirements of Britain and our Colonies.

2255. I think your views, as already given in evidence, were rather in favour of having a school in each country?—I should be in favour of one national school.

2256. You said, did you not, that in Scotland it would be better to have one at Edinburgh?—Yes.

2257. When you speak of having one national school, do you mean for the whole of Great Britain?—I believe that in Edinburgh we have facilities for the establishment of a school of forestry that would meet the requirements of the whole of the Empire, India, the Colonies, and home.

2258. You would propose to make Edinburgh the nucleus for the whole of Great Britain, would you?—I have no objection to the national school being situated elsewhere, but I know of no situation in which so many advantages could be combined as in Edinburgh. In Edinburgh, with the existing arrangements, we can at a comparatively small expense establish a school of forestry equal to the most celebrated schools on the continent of Europe.

2259. Is it the fact that there is a very great difference between the circumstances of forest management and forest growth in Scotland and England?—Yes.

2260. Would it not therefore be desirable to have a school in England as well as one in Scotland?—I believe that no disadvantage would result from having a national school in England, a national school in Ireland, and a national school in Scotland; but my belief is that it would be the better course in every way, not only pecuniarily, but in other ways, to concentrate the whole of our energy upon the establishment of one central school wherever the situation may be.

2261. Have you been in Ireland?—I have been in Dublin, but I saw little or nothing of the country.

2262. Where would it be desirable to establish the school in Ireland, if one were established there?—In Dublin.

2263. Do you know anything of the Agricultural College at Glasnevin?—I know little or nothing of it. I know more of the College or School of Science similar to the School of Mines in London. It appears to me that whatever advantages may be derived from the students going to Glasnevin, it would be better that they should go from Dublin to Glasnevin than that they should start at Glasnevin and come into the School of Science, or whatever the designation of it may be in Dublin.

Sir *John Lubbock.*

2264. Are there any other points upon which you wish to modify the evidence you have formerly given before this Committee?—None.

Dr. *Farquharson.*

2265. I think you are rather in favour, are you not, of adapting the existing institutions, than founding quite a new school of forestry?—To some extent I am. I believe that the best plan would be to have a school of forestry in Edinburgh under the Department of Education, so that that would be to a certain extent a new institution, and yet it is at the same time combining it with an established institution.

2266. In addition to that would you have another school in Dublin and one in London?—I think that it would be preferable to concentrate the whole of our energies upon the development of a school in Edinburgh.

2267. Your view would be, I presume, that the principles of forestry are the same everywhere, and that the variations adapted to the different conditions in different districts would be better treated practically afterwards?—Yes, they could be acquired on the spot. In short I would treat the study of forestry as the study of medicine is treated. The students of medicine are made thoroughly acquainted with the theory of disease, the phenomena of disease, the remedial applications, and remedial treatment, and then they are sent out to apply the information they have obtained to whatever patients come under their notice.

2268. It would not be safe, would it, to send out a doctor to practice who has only been trained theoretically; he has to go to the hospitals first?—Yes, he goes to the hospital to see what is done there, which is met by the student in forestry going either alone or with a professor to forests in the immediate neighbourhood or at a greater distance from the school; it is not required to have the students personally treat the patients in the hospital. They hear why this or that is done, and what the effect of the treatment has been, and what the condition of the patient was a fortnight or three weeks before.

2269. So far as I can make out from your description, there is not much attention paid in Spain to the practical instruction of young foresters?—It is a school for forest engineers, and every forest engineer must have passed through the curriculum before he can get an appointment, and then he gives directions to the woodmen.

2270. Then in Spain does the curriculum include a certain practical course?—Not a practical course, except that the students are required to go to visit the different forests, and see what is there done; they are not required to put their own hands to the work.

2271. Of course the only reason why a student is not allowed to do the work in an hospital, is that it is not safe for patients to be treated by an unskilled person, but he would learn his profession quicker and better if he did the work himself; would it not be better that a young forester should have the opportunity of doing these things himself instead of merely looking on?—It might be, but the knowledge might be too dearly purchased. The opinion of all the advanced students of forestry on the Continent is that it is better when studying to study, and when practising to practice, than to attempt to combine study and practice, and so divert the attention of the student.

Dr. *Farquharson*—continued.

2272. Would not the practice be much more likely to sink into the student's mind if it is taken at the same time as the theoretical instruction?—He might lose much of the scientific instruction. I prefer the word "scientific" to "theoretical," because we maintain that it is a positive science and not mere speculation. It is desirable that the student's whole time should be devoted to his obtaining this knowledge.

Mr. *Egerton Hubbard.*

2273. You are personally acquainted, are you not, with the schools of forestry in Germany?—Yes, I have visited nearly the whole of them.

2274. Could we get a translation of the different forest laws prevailing in the different states of Germany?—There is not a translation in English, so far as I am aware, unless some of the laws are given in Captain Campbell-Walker's work on forests in Germany.

2275. Have you not written a book on "Schools of Forestry in Germany," and do you not there give a translation of some of the rules?—I give the rules in regard to the whole of the schools, and information in regard to what is required in those states in which there are no schools of their own.

2276. Are the rules different in Bavaria and the other states, or are they Imperial?—They are all based upon the same lines, and hence I prefer the system in Spain, where they have broken off from the rut and given attention to what the nation required, rather than just following in the same lines as other schools. But whilst the rules in Germany follow the same lines, they vary very much, and in no two states are they exactly alike except in Hanover and Prussia, both of which are subject to the Prussian Government.

2277. Are there any old forests left in Spain?—There are a few, and the forest engineers in Spain have been struggling with the Government for the last 12 or 15 years to prevent the sale and utter destruction of those forests which still remain. The struggle is still going on. The newspapers generally are in favour of the forest engineers. They look not only to the supply of timber, but to the climatic effect of the forests. The problem which the forest engineers of Spain virtually propose themselves is this, how can we secure that not a drop of rain shall fall in Spain without its being utilised, and the forests are employed as an important means of securing this object.

2278. Is Spain being re-afforested at this moment?—To a very great extent, and it would be to a still greater extent if the forest engineers had their way. There has almost always been a division in the Ministry on that very subject, the Minister of Fomento being in favour of encouraging the foresters in all their enterprises; and the Minister of Finance trying to get the forest lands sold.

2279. The

Chairman.

2279. The Highland Agricultural Society have taken up the subject of forestry very considerably, have they not?—To some extent they have. They have for a considerable time given diplomas on examination, but there is no provision for the students acquiring the information; they must get it as best they can.

Dr. *Farquharson.*

2280. You say they give diplomas in forestry, but your point is that they have no curriculum; it is merely an examining Board?—Yes, it is merely an examining body.

Chairman.

2281. They have a syllabus, have they not, of subjects which the men will be examined in?—Yes, that is proper, and almost necessary. The Departments of Education at South Kensington have also examinations in forestry, but so far as I know there are no students at the Schools of Science under their control.

2282. They do not give diplomas, do they?—There is an examination, and there are prizes, if not diplomas.

Wednesday, 20th July 1887.

MEMBERS PRESENT.

Mr. Charles Acland.	Sir Edmund Lechmere.
Mr. Biddulph.	Sir John Lubbock.
Viscount Ebrington.	Mr. Fuller Maitland.
Mr. Evelyn.	Colonel Nolan.
Dr. Farquharson.	Mr. Rankin.
Mr. Munro Ferguson.	Mr. Mark Stewart.
Mr. Egerton Hubbard.	Sir Richard Temple.

SIR EDMUND LECHMERE, BART., IN THE CHAIR.

The Right Honourable the Viscount POWERSCOURT, K.P. (attending by permission of the House of Lords); Examined.

Chairman.

2283. I THINK your Lordship lives at Powerscourt, Enniskerry, and you own property in the counties of Wicklow and Wexford?— Yes.

2284. Have you read the evidence of Father Flannery, and also of your own head woodman, Mr. Gilchrist?—Yes.

2285. Will you give the Committee your views with regard to the evidence given by Father Flannery?—There were some remarks made by Father Flannery which I should like to touch upon. Father Flannery said that the Austrian pine ought to be planted. So far as I could understand his evidence, I should gather that he has only seen the plantations that have been planted in Connemara, and that no other kind of tree has been planted there besides the Austrian pine, the Scotch fir, and the common larch. My experience is that the Austrian pine is certainly not the best tree to plant; it does not grow into timber nearly so well as other kinds. I should prefer the *pinus laricio*, the Corsican pine, which I should say was the best, or the Douglas fir. Those are the two trees, as far as I know, that grow biggest, and form timber quickest. Then there are one or two other kinds which would be very useful, but they are more expensive than these I have named; one of them is the *picea nobilis*, and another is the *picea Nordmanniana*. They grow to a great size, and form very fine timber; but I should think that for general planting the *pinus laricio*, the common larch, and the Douglas fir would be the best.

2286. Is there any other point in Father Flannery's evidence that you wish to comment upon?—I see that one of the members of the Committee put it to Father Flannery that the Austrian pine was very valueless as timber; I am rather inclined to agree with that. I believe that it is not a very valuable timber. But besides the fir tree there is another tree that grows into timber quicker than the Austrian pine, and

Chairman—continued.

that is a different kind of tree, the poplar. Poplar trees which I planted eight or 10 years ago are already beginning to be biggish trees, and they would pay very well, I think.

Sir *Richard Temple.*

2287. Is the timber of the poplar valuable now?—Yes, it is used in Italy and France. There is not very much of it used in England. I have seen it used for boards.

2288. I know it is used in Italy and France, but my question was whether it is of much value in England?—It is not grown much in England unfortunately, but I think that both the Lombardy poplar and the black poplar ought to be more grown.

2289. What use do you think that such wood could be profitably put to?—It is used for boards and flooring and for anything that planks are used for.

Colonel *Nolan.*

2290. I presume that you are referring only to indoor work, because if planks of that wood are kept in the open air, is it not the fact that the wood goes bad?—I am not aware of that.

2291. Are you not aware that there is that distinction to be made?—No, I was not aware of that.

Sir *Richard Temple.*

2292. Were your Lordship's remarks applicable to Ireland as well as to England?—I was speaking more particularly of Ireland, because I do not know much about England; I have no property in England.

2293. Has the Douglas pine been grown largely within the limits of Ireland?—There has been so very little modern planting in Ireland that I cannot say it has. I have planted a great many myself on my property. I suppose I have

planted

Sir *Richard Temple*—continued.

planted some 30,000 or 40,000, and so far as I can tell, they are going to be splendid trees for timber.

2294. In what county have you planted them?—In Wicklow. I have planted them at all sorts of elevations, both down near the river and high up on the mountains.

2295. Would you recommend its being planted in the west parts of Ireland, in Mayo and Sligo, for example?—Yes, provided that the trees are planted in woods and not as single trees, because the tops of the trees are somewhat apt to be attacked by the wind; if they are planted together in large masses, interspersed with other trees, I think they would grow very well.

2296. Would a forest of Douglas pine on the west coast of Ireland stand the Atlantic breezes, in your opinion?—As I say, if they are planted in among other trees, but not by themselves. However, of course, you would not plant single trees on the west coast of Ireland, but you would naturally plant them in large masses.

2297. Does not the Douglas pine in the Rocky Mountains stand the breezes perfectly well?—Yes, but they are all planted in the valleys there. Of course, they could be planted in the valleys also in the West of Ireland.

Chairman.

2298. Is there any other point in the evidence of Father Flannery that you wish to draw our attention to?—I think there is only this: that Father Flannery said he did not think there was an Irish Agricultural Society; but, if he went to Dublin he would find that there are two there, or rather they are now both amalgamated in the Royal Dublin Society.

Sir *John Lubbock.*

2299. I supposed that when Father Flannery recommended the Austrian pine he was recommending it for its shelter, because every one knows that the timber is not good; do you not think that it is a valuable tree, particularly in exposed situations as a shelter for other trees?—Yes, I think that myself, certainly, and I see that Mr. Gilchrist said so too.

Sir *Richard Temple.*

2300. Speaking of the hills on the west coast of Ireland that face the Atlantic, could you indicate what trees would be suitable there; what trees, in your opinion, would be so rooted that they would stand the western gales?—I think that the Scotch fir and the *pinus laricio*, and the evergreen oak, would do very well; and also the silver firs, such as the *picea Nordmanniana*, or any of them; they stand the wind very well.

2301. Could you recommend any deciduous trees for such a situation as that?—Yes, I think the sycamore would stand better than anything against the wind.

2302. And would the beech be suitable?—Yes, both the beech and the oak. The sycamore stands wind better than anything else, I think.

2303. And the sycamore is a much quicker growing tree than the oak, is it not?—Yes, I think it is.

Colonel *Nolan.*

2304. And there is a very high price paid for its timber now, is there not?—Yes, it is very valuable timber.

Sir *Richard Temple.*

2305. We have heard that in former ages the hills on the west coast of Ireland were forested; is there anything at all to betray what those forests consisted of?—Yes. I have never been very much in the West of Ireland, but I imagine that it was the same all over the country, and certainly in the eastern counties the natural wood was oak, holly, and yew. Those are the trees that are found; I have found them repeatedly myself in the bogs among the Wicklow mountains. The oaks are large, and the yews are of very large size indeed, and holly is also found. The oak and the holly are trees indigenous to Ireland, I believe.

2306. Of the same sort, I presume, as we now see on the islands of Killarney?—Yes, and all over Wicklow. Those trees are grown entirely from the natural wood.

2307. Is the arbutus one of the ancient trees of Ireland?—I believe it is imported, but I am not certain about it.

2308. Would the holly and the yew be suitable trees to reforest those western hills with?—Neither of those trees grows to a very large size, or makes timber practically worth having, and of course you would want timber there. A yew, even of 2,000 years old, is not a very large tree.

2309. Would not any kind of reforesting on the west coast tend to fertilize the whole coast?—Yes, it would give shelter, no doubt; but I should want something that would grow a little quicker than the trees you have named.

Mr. *Egerton Hubbard.*

2310. Have you cut any of your own poplars?—Not many.

2311. Have you any experience of the timber that they produce?—I cannot say that I have. I have cut a *pinus laricio* of my own planting.

2312. Do you recollect the passage in Evelyn's "Sylva," in which he says that the Dutch thought so much of the aspen poplar that they looked upon the tree as being a dowry for a daughter, and they said particularly that it was the very best timber that could be found for resisting the action of fire?—Yes, I believe it will hardly burn.

2313. Have you ever sold any of your own home-grown poplar to architects?—No, I have not got enough of them for that, but I believe they ought to be planted much more than they are, because they are very excellent trees.

Chairman.

2314. Is there anything in the evidence of Mr. Andrew Gilchrist to which your Lordship wishes to draw attention?—Mr. Gilchrist said, in answer to Question 1728, that the land that I planted was worth 25*s.* per Irish acre, or 15*s.* per statute acre. I think he valued that land too high. It was mountain land, and I should not have said myself that it was worth more than half a crown an acre, or something of that kind; but he may

Chairman—continued.

have been referring to some other land in that answer. Then, again, in answer to Question 1756, he talked about the want of thinning in Irish plantations; there is no doubt that that is a great defect in Irish forestry. Most people who have demesnes or lands in their own hands have plantations which have been planted in former days, but which they have never thought at all of thinning; and the consequence is that the trees are being destroyed. Lord Carysfort and Lord Wicklow, in county Wicklow, have very extensive plantations, mostly of oak, which has grown up naturally from the stools of the old trees which were cut down, for the most part in the time of the Rebellion, I should suppose; but those trees, for want of thinning, are now growing up into wretchedly thin poles, and will never be worth sixpence. I have repeatedly spoken to both Lord Carysfort and Lord Wicklow on the subject of thinning their woods, and they say that it does not pay them; but I say even if it does not pay them they ought to thin them, because the woods are being utterly ruined.

Mr. *Munro Ferguson.*

2315. Lord Fitzwilliam has property also in that neighbourhood, has he not?—Yes; but I believe his woods are much better managed, as he has an English forester to look after them.

Chairman.

2316. Are there any other points in Mr. Gilchrist's evidence upon which you wish to make any remarks?—I think not.

2317. You have given your attention to the question of a school of forestry in Ireland, have you not?—Yes.

2318. Will you kindly give us your views upon that subject, as you take so deep an interest in it?—I should imagine that the best place for a central school would be the Royal Botanic Gardens at Glasnevin; those being, you may say, the only botanical gardens in Ireland. There, too, you would have the supervision of Professor M'Nab, who is a very learned man, as botanical professor. But with regard to the practical part of the training as a place where the pupils should be taught to plant, I am afraid that the soil there is totally unsuited for planting. As Father Flannery said, it would be much better, if it were possible, to have some experimental planting in Connemara, or in some part of Ireland where the land is fit for planting. Trees will not grow at Glasnevin, for even in the Botanical Gardens they grow very badly, although they have artificial earth put round them.

2319. In your opinion, Glasnevin would not be a suitable place for the practical instruction in forestry?—I think not. You have only to take a walk through the gardens and look at the specimen trees there to see how wretchedly the trees grow in those parts. The trees there are quite different from what they are on my side of Dublin, in Wicklow; but down in the west you could get a place for a nursery, and then it might be extended into plantations on the hills. I should like to tell the Committee the process which I have adopted myself in Wicklow, if you would allow me.

Chairman—continued.

2320. Will you kindly do so?—I went in for planting on rather a large scale for some years. I suppose I planted from 150,000 to 200,000 trees annually for some years. I found that buying trees of the size fit to plant; that is to say, what are called "twice transplanted trees," trees of three years old, would be too expensive, for they would cost from 7*s.* to 9*s.* per thousand, and I could not afford that in planting on so large a scale. My forester, who was a Scotchman, recommended me to buy trees at one year old from the nurserymen, such as Francis and Arthur Dixon, of Chester, and others, and make a nursery of my own. I accordingly established a nursery of six acres in extent, and I chose the highest and most exposed situation I could get in order to make the trees as hardy as possible. We planted those little trees at one year old, and transplanted them, and then in the third year we put them on the mountains, and those trees have grown as well as any trees could be expected to grow, being acclimatised to the district. Of course that plan was much cheaper than the other, because you can get the small trees at 1*s.* or 1*s.* 6*d.* per thousand, and then there is only the labour of transplanting them twice.

Mr. *Egerton Hubbard.*

2321. Have you planted the evergreen oak as a screen at all?—Yes; I have not planted very many though. I should like to have planted more of it; it is a grand tree.

2322. Could you multiply those trees at a reasonable cost?—Yes, from the acorn.

2323. They are very dear to buy, are they not?—Yes; I could not plant them very largely, because they are too expensive to buy. They make fine trees, and they stand the wind better than anything else. At Holkham, my father-in-law's, Lord Leicester's place, there are some of the finest specimens of the ilex that I know of. They were brought there from Italy by a former Lord Leicester, who built the house, in the last century. Some of those are from 10 to 15 feet and more in girth round the stem. They are growing there in a most exposed place close to the sea, and they find that the ilex stands the sea breeze better than almost any tree.

2324. From your experience should you advise the Committee that it would be worth while for any Irish proprietor to borrow money from the Government, at 3 per cent., in the hope of making his plantations pay; could you yourself make your own plantations pay with borrowed money, allowing for the interest upon it at that rate?—I do not know that I could; it would be rather a close thing. I may tell you that I did all my planting out of income, but I was obliged to stop it, as I could not afford to do any more. Now, of course, I am reaping it back again.

2325. A landed proprietor would have to wait for a generation before his planting paid him?—Yes. Those trees which I am cutting now for pit props, which Mr. Gilchrist told you about, and sending *viâ* Wicklow to the Welsh coalpits, are of not more than 21 or 22 years' planting; so that the planting there has paid pretty well, that is to say, you get a return in your own lifetime.

2326. You

Sir *John Lubbock.*

2326. You would consider, would you not, that apart from the return from the land actually planted, there would be a considerable advantage from planting, in the protection that it would afford to the land around?—There is no doubt about that.

2327. And from that point of view, would you consider that it would be desirable to plant?—Decidedly, even if it did not pay of itself.

Chairman.

2328. Referring for one moment to the subject of the possibility of establishing a school of forestry in Ireland, might I ask your Lordship whether under the auspices of the Royal Dublin Society (which I believe like other similar societies, takes cognizance of forestry, or could do so if necessary), it would be possible to form a nucleus in Dublin of a school of forestry in the way of giving lectures to students in forestry, leaving the practical part of the instruction to be given elsewhere?—I think so.

2329. And would it be possible to leave the practical part of the instruction to be acquired in nurseries and woods such as those of your Lordship, if you would give facilities as Lord Ducie and others have expressed their willingness to do in England?—I think so.

2330. Would that, in your opinion, be the best plan for establishing a school of forestry, or at any rate, a nucleus for instruction in forestry?—I think it would. The Botanical Gardens, at Glasnevin, are in connection with the Royal Dublin Society, to a certain extent, and are under Government management, as the Committee probably know. Then the lectures on any sort of scientific subjects connected with the Royal Dublin Society, are given at their Lecture Theatre, in Dublin, and every sort of scientific subject is discussed there. Therefore, lectures could be given there in connection with a school of forestry with the greatest facility. Professor M'Nab is in the habit of giving lectures there himself on various subjects.

2331. Could such a system as that which is established in Scotland of examinations in forestry and awarding diplomas be carried out in connection with the Royal Dublin Society?—Certainly. That would be the great object of the society if the idea was once taken up. There are many persons in Ireland who would be quite willing to become students in forestry. I have one man, for instance, who was a common labouring boy, and my forester sent him off to Scotland in order to learn forestry, and he came back knowing a certain amount about it. I put him to manage the saw mill, and he did that very well, and I am thinking now of making him foreman in the woods. Of course we should be very glad to get an Irishman, if we could find one, who knew anything about forestry, and we would much rather have him than a Scotchman.

Mr. *Munro Ferguson.*

2332. Is there much difficulty in finding a market for timber in Ireland?—People complain of that, and no doubt the distance from railroads, and the want of communication, do create rather a difficulty in the way of selling timber. I am rather specially advantaged in being so near

Mr. *Munro Ferguson*—continued.

to Dublin. All the timber merchants and persons wanting timber in Dublin are always sending to me for timber.

Mr. *Egerton Hubbard.*

2333. Have you got any osier beds in your neighbourhood?—I have not. I wish I had, for I think they would do very well.

2334. We have been told in evidence that it would well pay the people in Connemara to have osier beds, because they buy their osiers now in order to make lobster pots; is that the case in your part of the country?—There would not be so much of that on our side of Ireland, but there are old women who make lobster pots at Bray who are always coming to me for little bits of wood for the purpose, and we give them small young oak; but osiers would be far better.

2335. Can you tell us whether we could find anywhere a calculation of the relative value of the home-grown timber bought, and the foreign timber bought in Ireland?—I do not know. Some of the timber merchants in Dublin would be able to tell you about the foreign timber, I suppose, but I do not know who else could. Messrs. Martin, or Fitzsimons, or some of those large timber merchants in Dublin could, no doubt, tell you that.

Colonel *Nolan.*

2336. You have seen Connemara, I presume?—I have never been there.

2337. Have you been along any portion of the west coast of Ireland?—I have seen all the Kenmare river, and Lord Lansdowne's property, and all that neighbourhood, where, I think, there might be great facilities for planting, and also the town of Galway, and round there; but I have never seen Connemara.

2338. What would Wicklow be to look at if there were no trees at all; would it greatly injure the appearance of the country?—Yes, the great beauty of Wicklow is the mountains being clothed with wood; the mixture of wood, mountain, and water.

2339. The beauty of the country in Wicklow, I suppose, has a very good effect upon the population in many ways; for instance, it induces people to come and take land there, and also brings a large number of tourists there?—Yes.

2340. In fact it has a great deal to do with the making of Wicklow?—I think so.

2341. If there are large districts on the west coast of Ireland which have mountains and water, but which want wood to complete the beauty of the country, would it, in your opinion, be a great advantage, I may say almost a national benefit to give them woods?—I think so.

2342. Would it be worth the while of the Government to undertake the planting of some of those districts, if it did not cost too much?—I think it would.

2343. Have you any knowledge of what the rents of some of those wild mountain lands in the west of Ireland would be?—I do not know anything about the west coast of Ireland.

2344. But can you not judge from taking mountain lands in your district which would most nearly approach the wild mountain land in the

Colonel *Nolan*—continued.

west. For instance, what would be the rent of some of the wildest part on the Scalp Mountain, which, I believe, is common land at present, and pays no rent?—The Scalp belongs to me, but it is a good deal of it common, as you say.

2345. What would be the rent of that land; would it be about a shilling a statute acre? — I should think something of that sort.

2346. And would you be surprised to hear that land is much cheaper than that on the west coast of Ireland?—No.

2347. Still I may take it, may I not, that that class of land would be valuable for planting?—Certainly; it would be much more valuable for planting than for sheep grazing.

2348. Then, of course, it is a great item in considering the expenses of planting if you are able to get your land almost for nothing?—Certainly.

2349. What would it cost to plant a statute acre, supposing you were planting a thousand acres in a block on that class of land, planting it in the cheapest possible way?—It is some time since I planted any land of that sort, and my memory does not enable me to give you an exact figure.

2350. Could it be done for 3 *l.* a statute acre, including fencing and everything?—I daresay it might be.

2351. Of course labour would naturally be cheaper in the west of Ireland than it is in the east?—Yes; when we were planting, I think we paid our labourers who built the walls round the plantations 10 *s.* or 12 *s.* a week; they would not get as much as that in the west, I suppose. It is almost impossible with us to get them to work by piece work; they will not do it. It is much cheaper in the end to employ them at weekly wages, and have a man watching them.

2352. You think the planting could be done for 3 *l.* an acre, as I understand?—Yes; and of course the larger the plantation which you enclose the cheaper the fencing becomes.

2353. Do you think that it would well pay the Government to take up such land as you have described in Ireland for plantation purposes?—I think so.

2354. Do you know of any foreign governments that look after forests on their own account in that way?—I believe it is done in Germany, but I have no definite information on the subject.

2355. What do you think would be the best means to adopt if the Government decided to encourage planting in mountainous districts; would the best means be by advancing money to the proprietors, or would it be better for the Government to buy the land and do the planting direct through the Board of Works, or some similar Government Department?—If you have resident proprietors who could be got to do the planting, I think it would be better to get it done through them, because they would have a personal interest in seeing that it was properly carried out.

2356. But if you have *not* resident proprietors what plan would you suggest as the best?—Then the Government might do it, but they would have to buy the land, and I not know whether it would pay them.

Colonel *Nolan*—continued.

2357. Would there, in your opinion, be any difficulty in advancing money to resident proprietors; the value of the land, I take it, to the landowners would be from 10 *s.* to 1 *l.* per acre; and to plant it with trees, as I have proposed, would cost about 3 *l.* an acre?—Yes.

2358. Would there not be a difficulty in getting a sufficient margin of security on the security of the land itself if the money was advanced to resident proprietors?—Yes, I suppose there would be. At the present time I doubt whether any landowner would borrow money; they have not any security. We do not know at all where we are at present. The present state of things has utterly killed landlord's improvements.

2359. As I understand, you think that practically at present it would be better for the Government to do the planting themselves?—I should think so.

2360. If they were to establish a few plantations in Galway and Mayo, and try whether the trees would do there as well as they do on the east coast of Ireland, that would give us very interesting and useful information, would it not?—Certainly.

2361. Might that be done at such a small expense that the cost would be repaid in the course of 20 or 30 years?—I think so. With regard to the School of Forestry, as I said just now, I should suggest that the professorial part of the instruction should be given at Dublin or at Glasnevin, and the practical part of the training should be learned out among the mountains in the west, or wherever plantations in connection with the School of Forestry might be established.

2362. If you had a School of Forestry in Ireland, it would be very useful, would it not, not only as showing the students the grown-up plantations, but also as showing them the process of growth?—Certainly.

2363. And the students might be instructed in the system of planting in the west parts of Ireland?—Yes, I would take them out there and instruct them there.

4364. Have you any bobbin factories, or any factories for small articles in wood, near you?—No, the people in Dublin buy the wood from me in the plank or in the log, and it goes off to England.

2365. You are so near to Dublin that you get a ready sale for your timber?—Yes.

2366. In the wilder parts of Ireland, where the carriage of wood is more expensive, have bobbin factories been set up at various places?—I believe they have, but I have no information upon the point.

2367. Have you not bobbin factories even in Wicklow?—They have tried them, but I do not know exactly with what result. As regards my woods, while I do not say that they pay any very gigantic profit, they do pay their way certainly; for instance, I made 600 *l.* or 700 *l.* net profit out of them this last year. Lord Wicklow and Lord Carysfort have got a great deal of woodland property which might be made of use, but they tell me that it does not pay them. My timber is carted on to the railway, and then is sent by sea from Arklow; and, as Lord Wicklow and Lord

Colonel *Nolan*—continued.

Lord Carysfort's estates are right down near the port, I do not understand how it is that they say planting does not pay.

2368. Do you consider that Government woods on a large scale, besides having other advantages, might very likely pay their way?—It is certainly very likely that they would pay their way eventually; but of course they would not until they were 20 or 30 years old.

Sir *Richard Temple.*

2369. In your opinion, would the re-foresting of the hills on the Atlantic side lead to a gradual improvement in the condition of the peasantry there?—I should think it would. The working up of the timber would give increased employment to the peasantry.

2370. Would it not also have the effect of improving their dwellings by giving them the command at a cheap rate of timber for rafters and beams, and so on?—Certainly. There is one point, however, which you would have to do something about, and I am afraid that it would be rather difficult to meet, and that is to instruct the peasantry that this planting is being done for their benefit, because I know from experience even in Wicklow, where I suppose we are a little more civilised than they are in Connemara, I have more than once had plantations, which I had just planted, burnt. I have never been able to prove that they were maliciously burnt, but my suspicions were very strong. It would have to be explained to the people somehow or other that it would be to their advantage to leave the plantations alone, otherwise you would find that they would be always setting fire to them.

2371. I take it that what your Lordship has already said about the dwellings of the peasantry would also apply to their domestic furniture?—Certainly, because, of course, when you have a mass of timber in the country you would have a carpentry trade springing up there when the timber got large enough to be worked.

2372. And the same remark would also apply to agricultural implements, would it not?—Yes; the ash would be the right wood for them.

2373. Perhaps it would not equally apply to fencing, because the fencing in that part of the country would probably be with stone?—All over the west of Ireland the fencing is done with stone, and it would not therefore apply so much to fencing; but still the people are always asking me for bits of paling, as they call it, to put on the top of what they call the ditch round their fields, and that would also take a quantity of timber.

2374. Then an abundant supply of timber would also be useful to some extent for fencing?—Yes, to some extent.

2375. And of course it would be very useful for making agricultural implements of all kinds, and carts, and so on?—No doubt; but it would be some time before it came into use for agricultural implements, because ash would be the timber for that purpose, and you would not get much use out of the ash until the trees were 80 or 100 years old.

2376. Would the presence of the plantations also tend to improve the condition of the neighbouring land, and render it more readily cul

Sir *Richard Temple*—continued.

tivable?—Yes; you see the effect of woods in the Scotch glens where the plantations shelter the land, and make it worth a great deal more than if they had not any woods there.

2377. Would it tend to mitigate the climate in winter on the Atlantic side?—Yes, it would mitigate the climate of any situation.

2378. Is the climate on the Atlantic side severe in winter?—I believe it is, but I have no knowledge of the west coast of Ireland.

2379. In reference to the suspicion that your Lordship says the peasantry might have against plantations, in what way does that suspicion arise, and to what is it directed?—It is the natural thing in Ireland for the peasantry to object to having the land taken away from them, and if the land is taken away from them for planting, I am afraid that they would think that the planting was doing a great deal of injury, although in reality the benefit of it to them afterwards would be much greater.

2380. Supposing that the land that was taken away had been uncultivable for generations, would they feel that same suspicion?—I do not know; I only know that they do in my case. However, they have got over that now, and are beginning to find out that the woods are of advantage to them, and they are not burning them any more.

2381. Is the superiority in the social condition of the peasantry in Wicklow, as compared to the peasantry on the west coast of Ireland, at all attributable, in your opinion, to the fact that Wicklow is forested and the west coast is deforested?—I should hardly attribute it to that myself. We are nearer to civilisation in Wicklow than they are in the west in a general way, but I do not know whether that is attributable to the presence of forests. But if there was a quantity of foresting going on, no doubt people would get better wages and gradually reach a better civilisation.

Colonel *Nolan.*

2382. I understand you to say you were afraid that the people might burn the trees; let me ask you, in the first place, is it not the case that it is only possible to burn plantations at certain periods of their growth, when they are young and when the weather is very dry?—I am afraid that you could burn a wood at almost any age.

2383. Could you burn it easily at any age?—I think so.

2384. Have you seen many cases where woods of any age have been burnt?—If you have very old trees standing far apart, they might not be so easy to burn, but when the trees are in growth at all they burn very easily. In fact, I have woods of my own where trees of 20 years old have burnt easily, and I suppose the trees up to 30 years growth would burn.

2385. But as I understand, you have not had trees burnt of 30 years growth?—There was a wood on the Scalp, which you mentioned just now, which if you travelled through it you can see was burnt for me, as they say in Ireland. That was planted by my father, and the trees would be about 30 to 40 years old.

2386. If the trees are planted in blocks, so as

Colonel *Nolan*—continued.

to guard against fire, the effects of the fire are not so very marked, are they?—The fire would consume the whole of the woods.

2387. But if they are planted in blocks it could not do so, could it?—If they are planted in blocks with spaces between, of course, it would only burn that individual block, but, as I have said, it does not do to plant small patches of trees, because they do not grow so well. They grow far better and much quicker in large masses.

2388. But is it not possible to combine the two methods of planting them, in masses, and yet guarding against fire by planting them in blocks, as I have described?—It is possible.

2389. And is not that plan of combination recommended in some forestry books?—It may be. I should not do so myself.

2390. I understood you to say that the peasantry might be annoyed by having the land taken away for the purpose of plantations; would you not consider that the parish priest of such a parish as Carna, county Galway, would be well qualified to speak upon such a point as that?—Yes; I have seen Father Flannery's evidence.

2391. And he said, did he not, that they would not object to the plantations?—I was very glad to hear it.

2392. Would it not make a great difference to the peasantry if they had some hundreds of thousands of acres of other mountain land at such low rents as 4*d.*, 6*d.*, and 8*d.* an acre always available?—Yes, of course it would.

2393. When you speak of the peasantry being annoyed at having the land taken for plantations, you were probably thinking of some district in which there is no other mountain land for them to go to?—Yes. Of course we have not the same extent of mountain land in Wicklow as they have in the west.

2394. Is it the habit of people in Wicklow to go eight or 10 miles to hire a mountain for their cattle?—I think not.

2395. Are you aware that in Connemara it is the habit of the peasantry to go eight or 10 miles to hire mountain land?—I daresay it is.

2396. Do you think that that would have a very appreciable effect upon the feelings of the peasantry?—Yes, it might. They have more elbow-room in the west, I daresay.

Viscount *Ebrington.*

2397. Do you know whether the same timber has been found in the bogs on the west coast as you speak of as being found in the bogs in the eastern hills?—Oak is principally what is found in the western bogs, and I believe bog yew has been found, but I have no absolute knowledge upon the subject, except that there are specimens of trees of both kinds, of oak and of yew, in the Royal Irish Academy in Dublin, which I believe have been found in the western parts of Ireland; so that I suppose they are to be found all over the country.

2398. Do you know whether the trees which are found in the western bogs appear to be as well grown as the timber which is found elsewhere?—I could not say.

Dr. *Farquharson.*

2399. So far as I can gather from your evidence, and that of Father Flannery, tree planting in Ireland is much more likely to be a successful speculation than it is in England or Scotland, for most of the witnesses for England and Scotland have told us very plainly that they do not think that planting is a very paying thing, or is likely to be so in the future; is there anything in the soil or climate of Ireland that makes it specially fitted for planting?—I should agree with Father Flannery that the limestone is not favourable to planting; trees do not grow so well on limestone as on other soils; but, on the other hand, on the mountains, where there is a quantity of heathery land and vegetable deposit, trees will grow very well; on the granite.

2400. Is your own commercial success in growing timber due in any way to your having grown a special kind of tree in which you are able to compete with the foreigner?—I think it is principally owing to my being so near a market. I agree in thinking that the profits will not be very large.

2401. On the west coast of Ireland, where the land is very poor, the prospects for commercial success are not very good, are they?—I am afraid they are not.

2402. Do you think that under those conditions Government are likely to grant large sums of money upon which they cannot expect to get any return in the future?—I am afraid it is rather doubtful. As improving the country by the shelter they afford, and so on, of course plantations would do a great deal of good, but I am afraid they would not pay much.

2403. Do you think that the contingent advantages of shelter and other secondary advantages would make it worth while to plant?—They would be worth a great deal, certainly.

2404. You spoke just now of the Agricultural Society of Dublin; they are an examining board on agricultural subjects, I believe, of a similar kind to the Royal Agricultural Society in England?—I believe so.

2405. Do you know whether they include forestry in their examinations?—They have not hitherto, but it would be a great advantage if they did.

2406. Would it be desirable, in your opinion, to have some machinery to induce the agricultural societies in England and in Ireland to have an examination in forestry as we have in Scotland?—I think it would be an excellent thing to have a branch in forestry. I may say that in the Royal Dublin Society, which is an agricultural society also, they are very anxious to take the matter up. I am on the council of that society, and the matter has been repeatedly broached there, and I am sure that if there was any chance of doing any good it would be taken up by the Royal Dublin Society.

2407. Do you think that there would be any difficulty in getting the theoretical classes carried on in Dublin or Glasnevin?—It could be perfectly well done; you have Professor M'Nab there.

2408. Would he be able to undertake that work, in addition to what he has at present?—I daresay he would; it would not entail very much

extra

Dr. *Farquharson*—continued.

extra labour; he might, no doubt, require a little extra salary.

2409. Do you think that the neighbouring proprietors would be willing to grant facilities to the students to learn the practical part of their work in their woodlands?—I think so; I certainly would myself, and Lord Fitzwilliam probably would at Coolattin Park; and I daresay the Duke of Abercorn up in the north would, and perhaps others. It would be a great amount of advantage to those proprietors, because they would get so many men working in their woods who were learning their trade at the same time, and who would be afterwards available to take places of trust on estates in Ireland without their having to send across the Channel to get the men.

2410. And that plan would ensure a thorough scientific management being applied to the woods, would it not?—Quite so. Of course the trees would be well managed under such a system as that.

Chairman.

2411. You have already told the Committee that you think that Dublin would be the best centre for a school of forestry, the Botanical Gardens there being of great advantage, and that facilities might be given by neighbouring landed proprietors for students learning the practical part of the work in their woods; have you any other suggestion which you wish to make to the Committee on that point?—I think that the central school should certainly be at Dublin, or rather in Glasnevin, which is so near Dublin that I speak of it as Dublin. The lectures could be given at the Royal Dublin Society, and the practical instruction could be given in the woods of those who chose to afford facilities; but I think the planting part of the training should be done out in the west. A nursery should be established there of a good size, say 10 or 15 acres, and trees should be grown there to show the students how trees are sown, and when they should be transplanted, and at what age they should be planted out. I would let the students plant them out on the hills themselves, and by that means get a practical knowledge.

2412. Could you name any place in the west of Ireland which you think would be better than another for that purpose?—I do not know that I could. Connemara has been mentioned; there is a vast amount of land available there; and perhaps it would be as good a place as any other.

Sir ALEXANDER TAYLOR, called in; and Examined.

Chairman.

2413. I BELIEVE that you are President of the Royal Indian Engineering College at Cooper's Hill?—Yes.

2414. What class of men are admitted as students at that college?—They are the public school boys of England; they represent all classes that you would expect to find at a public school.

2415. Have you had any men of the class who generally become land agents in England?—We have no men who intend by-and-bye to become land agents. The forest side of the college is specially for the Indian forest service.

2416. Supposing that there were any demand, or any wish on the part of a certain class of men who were ultimately to become land agents to be attached to Cooper's Hill College, could any accommodation be provided for them?—We profess to allow anyone who wishes to follow our course of instruction to join the college; but he would have, in order to do himself justice, to pass a preliminary examination to show that he was qualified to listen to our lectures; otherwise we should be speaking over his head; but subject to that condition, and to our having room available, under our present rules it would be quite feasible for anyone to join our classes.

2417. What would the preliminary examination consist of?—The Secretary of State for India prescribes a certain examination which the students have to pass, the details of which I have here; they are rather lengthy. They have to comply with the requirements of that examination; but I should think that if anyone wished to

Chairman—continued.

come and attend a series of our lectures no objection would be raised to his doing so without an examination, provided that we were not in any sense made responsible for the result; he could probably do that for some quite trifling payment.

2418. You think that provision might be made, under certain circumstances, for exempting men of the land-agent class who desired to avail themselves of the advantages of Cooper's Hill from the preliminary examination, allowing him to attend the lectures without living in the college?—If they desire to do so, and do not hold us responsible for the result.

2419. Would those men be able to get accommodation at the college?—Probably not. If they came as out-students to attend lectures, probably they could do so at a very small charge, say 10 *l.* a term, or 20 *l.* or 30 *l.* a year.

2420. The expense at Cooper's Hill of in-students is about 180 *l.* to 200 *l.* a year, is it not?—The fees payable to the Secretary of State are 180 *l.*

2421. But if these men lived out of college as out-students, and provided themselves with their own lodging and food, what would their fees at the college amount to?—We have had a case of a man coming to us under those terms, and I think the agreement was that he should pay 10 *l.* a term; that is, 30 *l.* a year.

2422. Supposing there were 20 or 30, or whatever the number might be, of students coming up simply for forestry instruction, I suppose they would not require a great deal of the scientific

Chairman—continued.

instruction which is given at Cooper's Hill; but looking at the simple subject of forestry, what provision could be made for giving them forestry instruction?—They could attend any of the classes that are under instruction in forestry only; they could select any classes they liked.

2423. Do the forestry classes take place daily?—There are two professors teaching in forestry subjects, and they give between them, I should think, two lectures every day.

2424. The students make occasional visits to woodlands, I suppose?—Yes, the grounds of the college are made use of for the smaller illustrations that are being constantly put before them. Those learning botany go occasionally to Kew; and the forestry men have the range of Windsor Park before them, and use it.

2425. I suppose that in the immediate neighbourhood of Cooper's Hill there is no want of accommodation; but there are plenty of houses where young men could get lodgings?—The extent of the accommodation is limited, but no doubt a moderate number of persons could get taken care of.

Sir *Richard Temple.*

2426. Is there not a considerable village at Egham?—Yes.

2427. That would afford lodgings for a good number of persons, would it not?—Yes, of a kind.

2428. Is there not also another village in the neighbourhood?—Yes, St. Jude's, or New Egham, as it is called now; but the amount of accommodation there is not very large.

2429. Twenty or 30 young men could find accommodation there, I presume?—I do not doubt that they could, but the accommodation in the neighbourhood is distinctly scanty.

2430. The instruction which we give at Cooper's Hill in forestry is distinctly of a superior kind, is it not?—Entirely so.

2431. But supposing that men were to come to Cooper's Hill for instruction who were not intending to be foresters, strictly so called, but to occupy subordinate grades, such as men of the woodman or woodreeve class, have you the means at Cooper's Hill of giving them the instruction that they would require?—I do not think that the lectures and instruction which we give at Cooper's Hill would in any sense be intelligible to woodmen. Some different arrangements would have to be made for them. I should be afraid that our lectures would be over their heads. I think you would have to organise a special set of lectures and special arrangements to meet their case.

2432. For which we have no provision?—For which we have no clear provision at present. There would have to be some special course of instruction for them additional to what we have now.

2433. Could you easily add that instruction on to what is given at present?—The difficulty would be the accommodation, and we should have to get extra hands to do the work. The work to be done now is as much as our professors can stagger under.

2434. But in our forestry lecture-rooms have we room for out-students in addition?—Our forestry lecture-rooms at the present minute are absolutely full, but I think that the Secretary of State will find it necessary to enlarge the forestry rooms. The forestry class rooms were built each for five students; we have packed 10 in. You might get 11 in, but you could not put 12 desks in, I think; there are at present 10. There is a proposal, however, before the Secretary of State, or there will be to-morrow, that these rooms should be enlarged so as to take in two classes at the same time.

Sir *Richard Temple*—continued.

2435. Has that matter with regard to the enlargement of the accommodation been before the board of visitors?—It has come to me to-day just as I was starting, and it will probably be before the Secretary of State to-morrow; the matter has never been brought before the board of visitors. The difficulty has only cropped up now, and it arose in this connection: the professor wants to get two classes into one room, so that he may address 20 young men instead of addressing two separate classes of 10 each.

2436. What enlargement is proposed?—We want to enlarge one room to take in 20 students instead of 10; the room to be doubled, in fact.

2437. Would you expect to fill that accommodation with the present Indian demand?—Yes, but with a certain margin to spare. There would be room for a few extra desks in the room; there would not be room for 20 or 30 extra, but three, or four, or five probably could be got in. We have no intention of going beyond that.

2438. To do anything noteworthy for English forestry we should have to add considerably to the existing class-rooms, should we not?—Not very much; but we should have to add to the present class-room accommodation. Facilities exist for expanding; there is no difficulty in that respect.

2439. Could the present teaching staff teach these additional students?—Not without extra hands. The guidance is there, but the number of mouths to speak is limited. Anyone who could follow our regular classes could come, because it is just as easy to speak to 30 as to 10; but he must not require an extra class: he must follow precisely the Indian Forestry Department course.

2440. The Indian Forestry Department course is a course of scientific forestry applicable to every country and climate, is it not?—Yes. You cannot introduce a special course of lectures at Cooper's Hill without providing extra men and extra class-room accommodation. The proposal, as I understand, was that the additional students should not sleep in the college, but find accommodation outside.

2441. At this moment, is there much spare dwelling-room accommodation available in the college for the students?—No, I may say there is none; we are full.

Dr. *Farquharson.*

2442. Does any one attend your forestry course except the Indian students?—No one at present.

2443. It

Dr. *Farquharson*—continued.

2443. It is quite evident that your course would only be adapted to men who can afford to go to the college for two years, and who expect to get a large return in after life in the way of higher remuneration?—It is only suitable for men wanting to learn forestry fairly thoroughly.

2444. The great difficulty which we have in Scotland is, that a forester who takes charge of a limited area of woodland gets a salary of only 70 *l.* or 80 *l.* a year, and of course he could not afford such a training as that?—Our arrangements at Cooper's Hill would not suit such a man as that; but if he wanted instruction in any particular subject, either botany or forestry, or entomology, he would be at liberty to come and attend lectures in those particular subjects at Cooper's Hill; that could easily be done.

2445. Do you not think that those lectures would probably be above his head?—Probably they would be above a man of that class.

2446. What we want in Scotland is a short course of two or three months; would it be possible to make any arrangements at Cooper's Hill for the establishment of a short course of that sort?—It would be very difficult; there is nothing that would lend itself conveniently to such an arrangement.

2447. Your rooms are full, as I understand, and your professors are full of work?—Quite so.

2448. Therefore you would require both new rooms and professors to take up such work?—We should require both new rooms and additional professors.

2449. That would be an expensive thing, I suppose?—Not very, because the extra kind of teaching you would want for it would not be of a very expensive class. The guidance we have at Cooper's Hill already, and you simply want assistants who could take the less forward men, and make a particular course for them.

2450. Do you think that such a system might be made self-supporting?—I have no means of judging; but so far as I can see, I should not think it could.

Mr. *Rankin.*

2451. Is there a Government Grant to Cooper's Hill College?—The Government pays all the expenses, and charges the students certain fees. The Government's hope is that those fees will cover the expenses, and I think at the present time they do; it is just about a balance. If they do not cover the expenses, the excess is a charge to the revenues of India.

2452. What are the fees for the term?—£. 60 a term, all told; that is, including food, accommodation, and teaching.

2453. That, of course, would be beyond the reach of all persons, except those in tolerably affluent circumstances?—No doubt, 180 *l.* a year is a good deal to pay.

2454. Is the tuition at Cooper's Hill at all suitable for the instruction that ought to be obtained by men who are going to be land agents, and attend to forestry?—I should not think that a land agent could profitably give two years of his life to the study of forestry. I should think that he would require something more elementary than the teaching at Cooper's Hill.

Mr. *Rankin*—continued.

2455. Then you consider that Cooper's Hill College would have to be re-modelled, to a great extent, before it could answer the purpose of an English school of forestry?—A special course would have to be added to it suitable to meet the English want.

2456. Do the young men who are trained at Cooper's Hill go out to India as private persons, or as Government servants?—They go as Government servants.

2457. Do they attain that position by examination, or how is it attained?—The men are first selected by competition in an examination by the Civil Service Commissioners in the usual way, and all who pass that examination go through a further test which the India Office requires from them, and then they come to Cooper's Hill for special instruction, and they are safe for a Government appointment if they only conduct themselves properly, and come up to a certain pass standard.

2458. Do you know whether forestry in India is made a paying concern?—It is immensely paying.

Sir *Richard Temple.*

2459. Is it not the fact that the Forestry Department in India now yields a surplus of several hundred thousand pounds, or, indeed, I think I might say of half a million or more?—I should say more. But then it ought in fairness to be stated that the Government have handed over to the Forestry Department an immense property in grown trees, and say to them, "There is your property; make what you can of it," and, of course, it is no wonder that they do make something out of it.

Mr. *Rankin.*

2460. Does not that immense revenue come rather from the cutting down of grown trees; you could not make such a profit of course if you had had to plant the trees?—The Government has handed over to the Forestry Department an immense property, and that property the department has managed wisely, and it will no doubt be a great benefit to India.

2461. However, we may take it, may we not, that the conditions in India are altogether different from the conditions in England in regard to forestry?—I should think so.

Sir *Richard Temple.*

2462. Is it not the fact that Indian forests, as a rule, are old forests, consisting of grown timbers, and that the tree-planting operations of the Forest Department are but limited?—That is quite the case.

Sir *John Lubbock.*

2463. You stated in reply to the Chairman that Cooper's Hill College was specially adapted for Indian forestry, but I presume you were referring then only to the forestry branch of instruction in the college, because Cooper's Hill is specially an engineering college, is it not?—It was specially started as an engineering college,

Sir *John Lubbock*—continued.

and then it had to supply recruits for the Telegraph Department, and now it supplies also students for the Forest Department.

2464. The forestry students form a small proportion of the whole, do they not?—The number of forestry students turned out every year is ten; the number for the Telegraph Department is two; and the number for public works is 15, making a total of 27 altogether.

2465. Can you put in the conditions of the examination at Cooper's Hill to which you referred?—Yes, I think this Paper is correct as it stands. (*The same is handed in,* vide *Appendix.*)

2466. Are the forestry students at Cooper's Hill in receipt of instruction in other subjects as well, or do they devote the whole of their time to forestry?—They are in receipt of instruction in other subjects as well.

2467. Probably those other subjects would be little adapted for English land agents or woodreeves?—A knowledge of surveying is good, and some little knowledge of accounts is good; and, perhaps some amount of drawing is desirable.

2468. Do the students also receive instruction in subjects specially connected with India, which would not be adapted to those intending to remain in England, or to go out to the Colonies?—No; the instruction is general.

2469. Is their time practically filled up by forestry instruction supplemented by only those three other branches which which you have mentioned?—No; there is a good deal more than that which I could mention. They join the other students at the college for a certain time in mathematics pure and applied. Then they join the other students to a certain extent in drawing, both free-hand and geometrical drawing; they go through a short course of descriptive engineering; that is to say, instruction as to timber and stone, iron, and other materials, their properties, and how they are used; then they go to special lectures in French, because a good many excellent forestry books are written in French; they go through a certain course of physics, and a certain course of geology, and a short course in accounts. These are all the subjects they take up outside of the special forestry subjects.

2470. Do they begin with those subjects as soon as they enter the college, or are some of them taken up only in the second year?—They take them up rather in the beginning, but the study of them is interlarded all through their course. The two courses of forestry aud engineering are made to dovetail together.

Sir *John Lubbock*—continued.

2471. A good many of these subjects would not be suitable for English land agents or woodreeves, would they?—No.

2472. When the forestry students first come to Cooper's Hill, are they supposed to know anything of forestry, or do you give them the whole of their forestry instruction?—We give them the whole of their forestry instruction.

2473. You begin from the very beginning, so far as forestry is concerned?—Yes,

2474. If Cooper's Hill College was to receive land agents, or woodreeves, or gentlemen who intended to pursue forestry in connection with the Colonies, you say that it would require the organisation of a special department to meet their wants?—I did not understand that I was asked to say anything about the education of persons suitable to go out to the Colonies as forest officers. If any of that class come to us, I think they had better go through our course. Anyone who wants to make forestry his main work should take our course.

2475. As regards land agents or woodreeves, or gentlemen who intend to manage landed property in England of a few hundred acres, or rather more, do you think that it would be necessary to organise a special department for them?—For the more educated men you would want one course, and a distinct one from that again would be necessary for the woodreeves, I should expect.

2476. Would it not be possible for the woodreeves to receive at Cooper's Hill the earlier part of the education which is given to forest officers, because, as I understand, you say that the students, when they come in, know nothing of forestry, and that, so far as forestry is concerned, you begin from the very beginning; would not that earlier instruction be suitable for woodreeves and land agents also?—I should be afraid that the language used in teaching woodreeves would have to be totally different in quality from that which would be used in teaching educated men.

2477. Therefore, in fact, if a school was to be organised in connection with Cooper's Hill, adapted to the wants of English forestry, an entirely separate department would, in your opinion, have to be organised?—"Department" is perhaps rather a large word to use; I should rather say totally distinct courses would be necessary for them.

2478. Can you say at all whether the authorities at Cooper's Hill would be prepared to organise such a course?—I am not master of the situation, and I cannot say.

Sir RICHARD TEMPLE (a Member of the Committee); Examined.

Sir *John Lubbock.*

2479. Sir Alexander Taylor told us just now that he was not in a position to say whether the authorities at Cooper's Hill would be prepared to organise a special course of instruction suited to English requirements; can you give the Committee any information as to that point?—Yes.

Sir *John Lubbock*—continued.

The educational course and all other arrangements, except the discipline of Cooper's Hill College are, in the first instance, under a board of visitors, consisting chiefly of the highest authorities in civil engineering. Of that board, I have been since 1881 the chairman. Now, if it were

Sir *John Lubbock*—continued.

were desired to further adapt the forestry instruction at Cooper's Hill to British or Colonial requirements, it would be desirable that a reference should be made to the board of visitors, or if the reference were made to the Secretary of State for India, who is the supreme executive authority, he would, according to the constitution of the college, refer that question to the board of visitors, for consideration and report. On receipt of such reference, I feel sure that the board of visitors would give it favourable consideration. Of course, I cannot at this moment answer for my

Sir *John Lubbock*—continued.

colleagues without previous consultation with them and I do not recollect that we have ever had this particular question before us, but inasmuch, as it has been our pride and pleasure to adapt our instruction in civil engineering to the wants of the Empire generally, as well as of India particularly, I should fully hope that we should adopt the same principle in regard to forestry, and I for one, should be glad and thankful to have such a reference made to our board of visitors to see what we could make of the matter.

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APPENDIX.

Appendix, No. 1.

PAPER handed in by Mr. *M'Corquodale.*

ESTIMATE VALUE of TWENTY ACRES of LARCH CROP, at Eighty Years of Age, charging Accumulating Compound Interest on Outlay, for the First THIRTY Years, at the Rate of 3½ per Cent.

£. s. d.	MISCELLANEOUS ITEMS.	AMOUNT. £. s. d.	£. s. d.	£. s. d.	£. s. d.
	Cost of fencing 20 acres	41 – –			
	Cost of plants	25 – –			
	Cost of planting	8 – –			
	Rent of 20 acres, at 10 *s.*, for one year	10 – –			
			84 – –		
	Compound interest on the above 84 *l.* for 12 years	– –	– –	126 18 7	
	First thinning, at 12 years, 4,000 at 1 *d.* each	16 13 4			
	Deduct cost of thinning	8 6 8			
	Deduct balance in favour of thinning	– –	– –	8 6 8	
					118 11 11
118 11 11	At 17 years of age, compared for 5 years	– –	130 2 10½		
	At 17 years of age, second course of thinning 200 trees per acre, 6,000 at 2 *d.* each	50 – –			
	Cost of thinning and brushing	25 – –			
	Deduct balance in favour of thinning	– –	25 – –	– –	105 2 10½
105 2 10½	At 22 years of age, compound interest, at 5 years	– –	124 14 1½		
	Third course of thinning, 8,000 trees, at 4 *d.* per tree, being at the rate of 400 trees per annum	133 6 8			
	Cost of thinning and repairing fence	50 16 8			
	Deduct balance in favour of thinning	– –	82 10 –	– –	42 4 1½
42 4 1½	Compound interest for 8 years, at 30 years of age, 300 trees per acre	– –	55 6 1½		
	6,000 trees, at 6 *d.* per tree	150 – –			
	Cost of thinning	37 10 –			
			112 10 –		
	At 30 years of age, balance in favour of plantation	– –	– –	– –	57 3 10½
	At 37 years of age, 200 trees per acre, 4,000 trees at 2 *s.* per tree	– –	– –	400 – –	
	Deduct cost of thinning	– –	– –	33 6 8	
					366 13 4
	At 45 years of age, 100 trees per acre, 2,000 trees, at 3 *s.* 6 *d.* per tree	– –	– –	250 – –	
	Cost of thinning, at 2½ *d.* per tree	– –	31 5 –		
	Fence repairs, &c.	– –	25 – –		
	Cost of thinning and upholding fence	– –	– –	56 5 –	
	Balance in favour of thinning	– –	– –	– –	193 15 –
	Matured crop at 80 years of age, 130 trees per acre, in all, 2,600, at 20 *s* per tree	– –	– –	– –	2,600 – –
	TOTAL Amount in favour of Plantation			£.	3,217 12 2¾

Appendix, No. 2.

PAPERS handed in by Mr. *Macgregor*.

Loch Hoishen Plantation, Planted in 1825 and 1826.

Planting Days.		Days.	Particulars.	Per Scotch Acre.	Total Expense.
Began Oct. 29, 1825.				*s.* *d.*	£. *s.* *d.*
1825 - In October - -	2		Purchase of ground, 2231·870 Scotch acres: 25 years' purchase, at 9*d.* per acre per annum	18 9	2,092 7 11½
„ - November -	13				
„ - December -	5	20	Fencing, 6¼ miles	4 9	530 4 9
1826 - In February -	10		Roads, 5 miles	3 5	383 6 10
„ - March - -	22				
„ - April - -	8	40	Plants, 4,198,500	6 5	713 14 4
„ - November -	13				
„ - December -	6	19	Planting, 4,597 men (for 1 day)	2 10	316 2 11
Total planting days - - -		79	Contingencies, herds, taking up plants, &c.	1 –	111 11 11
Ended December 26, 1826.				37 2	4,147 8 8½

2,018,100 one year transplanted larch, 12 to 15 inches, at 4 *s.* 4 *d.* per 1,000.
2,020,780 two year seedling larch, 8 to 10 inches, at 2 *s.* 1 *d.* per 1,000.
159,420 two and three year transplanted spruce fir, at 6 *s.* per 1,000.
4,155 men planting larch
442 men planting spruce } = 58 men for 79 days.

Loch Ordie Plantation, Began 4th December 1815, Finished 2nd December 1818.

Remarks.	Particulars.	Per Acre.	Total Expense.
		s. *d.*	£. *s.* *d.*
	Purchase of ground, 2,932 Scotch acres: 25 years' purchase, at 9*d.* per acre per annum	18 9	2,748 15 3
	Fencing 11¼ miles, at 5 *s.* 6 *d.* (per rood of 6 lineal yards)	6 2	902 11 3
* Additional expense incurred in making good the failure of plants, and other incidents.	Roads, drives, and bridges, at 7 *s.* 6 *d.*	8 -¼	1,177 6 –
	Plants, 6,377,100 at 4 *s.* per 1,200	7 3	1,062 17 –
	Planting, 7,623 men	3 3	476 9 –
	Herds, miscellaneous, and incidents	2 6¾	375 13 6
		46 –	6,743 12 –
	*Further incidents subsequently incurred	4 –	586 8 –
	Total, 2,932 Scotch acres at 2 *l.* 10 *s.* per acre	50 –	7,330 – –

2132·87 acres planted from 4th December 1815 to 20th April 1816.
586·70 „ „ from 27th November 1816 to 12th April 1817.
213·21 „ „ from 27th October 1817 to 2nd December 1818.
2,932·78

Appendix, No. 3.

PAPER handed in by the *Chairman*.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.

SELECT COMMITTEE on FORESTRY, 1885-86.

MEMORANDUM on the EVIDENCE of Colonel *Pearson* in reference to FORESTRY EDUCATION.

Preliminary.

SPEAKING generally, I find that I agree in the main with Colonel Pearson's evidence as to the importance and nature of a sound forestry education, as well for this country as for the Colonies and India, and also as to the classes for which more or less of this education is required, but that I am obliged seriously to disagree with his evidence as to the best means of supplying this education in this country, and with the reasons on which his conclusions are based. It is not improbable, however, that the short and single visits which alone Colonel Pearson was able to pay to the chief seats of instruction in this country in connection with this matter were inadequate for full investigation and reflection upon all the details, which his large and almost unique experience convinced him were of the highest importance.

For the sake of convenience, I will endeavour to consolidate the evidence, and to consider it as briefly as is consistent under the following three heads:—

(a.)—*The Classes for whom the Training is needed.*

(b.)—*The Nature and Extent of the Curriculum required.*

(c.)—*The Method and Institution most suitable for supplying it.*

(a.)—*The Classes for whom the Training is needed.*

1885 - - *Q.* 470, 471. 477. 482. 485. 497.
1886 - - *Q.* 9.

I agree with all this evidence, that the persons for whom the training in forestry or a forestry education is needed fall under two main divisions: (i.) Those who (like land agents) are to be managers, directors, controllers; (ii.) Those who are to occupy the subordinate positions of woodwards, woodreeves, wood-bailiffs, foresters, &c. Division (i.) may, as Colonel Pearson says, embrace two classes, those destined for India or the Colonies, and those for Home employment or responsibility. The latter, however, should I think, include also the owners of woodlands and Crown officials, and not land agents and surveyors only.

I agree that there is at present no complete provision for this training in this country; that the disadvantages of training on the Continent are most serious as to language, time, expense, and otherwise; and that the expectation is not unreasonable that the systematic training of our higher and lower forest officials would produce an improvement in the culture and utilisation of our woods and forests, as in India and elsewhere.

I would add that, regarding forestry as in a certain sense a branch of agriculture and estate management, the changing conditions of these industries renders the need in question a more pressing one, especially in the face of the foreign timber competition.

(b.) *The Nature and Extent of the Curriculum.*

1885 - - *Q.* 489. 491-3. 498. 500. 508. 538. 541. 589.
1886 - - *Q.* 9. 16-19. 30, 31. 75. 79. 108–111.

The essence of the whole subject lies here, and I agree with the following points of the evidence:—

First, That in a scheme for a sound and thorough education in forestry for the higher officials, there must be included, as in the Nancy course, all such subjects as—

Portions of agriculture, especially as to soils, manuring, draining, &c.;
Geology;
Physiological and systematic botany;
Entomology;
Mechanics and steam-engine;
Mensuration, land-surveying, and other practical engineering (road-making, &c.);
Building materials and construction (to a limited extent);
Arboriculture;
Formation and management of woods and plantations, in all branches.

But to these I deem it necessary to add—

Chemistry (with its important practical bearings on soils, timber, and timber growth, forest litter, economic products, &c.);
Some other portions of zoology;
Microscopic work, especially in relation to diseases, and insect ravages;
Book-keeping; and
Meteorology.

Secondly, I agree that it is absolutely necessary to have access to an illustrative forest, and illustrative woods and plantations of greater or less extent, for the purpose of practical illustration of the class-room teaching (without which this teaching would be almost practically useless) to see, and (if possible) take part in the practical operations, and to become acquainted with practical management on the spot.

Also, that these illustrative woods should include a good representation of both leaf, forest, and conifers; though not necessarily in the same locality, nor, perhaps, of such an extent as 3,000 acres; and an experimental station, or provision, for experimental operations, as in the Forest of Dean, under Sir James Campbell.

But I add (what has not been mentioned) that it is necessary to have ready access and facilities in regard to a good nursery for forest trees.

Thirdly, I agree that, as regards the pursuit of special forestry studies, it is the best and most economical method to carry these on *concurrently* with all the other branches of study which bear upon practical forestry; I mean, concurrently with all those branches of science above enumerated and their practical application. For I am assuming (although Colonel Pearson does not, I think, touch upon this) that it is essential that all these branches of science should be taught practically, as well as theoretically, and have abundance of practical illustration. It will be found that most of these branches of study, when taught with the special reference to their bearings upon practical forestry, are to a great extent mutually illustrative and auxiliary; and, accordingly, that the concurrent method of study is at once an economy of time and an aid to efficiency.

Holding this view, and assuming a precedent fair general education, I agree that the length of time devoted to these studies for the higher posts should be about two years. I do not believe that less would be sufficient, nor that much more could be required.

For the lower posts only an elementary knowledge, and only of some few of the branches of science would be required; but if it be desirable to give the class of wood-reeves, and such like, any scientific teaching, I must disagree with Colonel Pearson so far as this, that I do not think "three months" could possibly suffice for the purpose. Considering the lack of preparatory good education, I am rather of opinion that three months could only produce unsatisfactory results, and that at least six months, if not 12 months, would be required for results of much value.

Disagreements under this head.

In addition to the preceding, I disagree with the following:—

(i.) *Visits to French and German Forests.*

I am not satisfied (though I am not competent to express a decided opinion) that it is at all necessary to visit the great French and German forests for acquaintance with the cutting and removal of timber. If it were necessary this would raise a serious difficulty in the way of many students. The professor himself would doubtless visit these forests, but I am under the impression that ample illustration exists in this country of the methods of cutting and removal of timber to the extent of a student's necessities, and that the professors of forestry and engineering could readily supplement any deficiency.

(ii.) *Control of Professor of Forestry.*

I entirely disagree with the opinion that the 3,000 or 4,000 acres of illustrative forest, or anything like that amount, should be "under the absolute control of the Forestry Professor." I regard this opinion as a serious error. The principles and practice of forestry, which it would be the duty of the Professor of Forestry and his colleagues to teach, could be taught and illustrated with the aid of any sufficiently large and varied and well-managed woodlands, quite irrespective of the vesting of the control. Access to and facilities of all needful kinds in such woodlands might be readily obtainable and control unobtainable; and the duties of forest control and management might and probably would be incompatible with the discharge of the direct professorial and teaching duties, if the latter were onerous. I think that the professor ought to have the control of some plots or station, including nursery-grounds, but as to the bulk of forest or woods, my opinion is the diametrically opposite one, viz., that it would be injudicious to vest the control in the same hands as the teaching, *i.e.*, in the professor.

(iii.) *Direction of the Education.*

I entirely disagree with the opinion that "the general direction and control of the system of education should rest with a council or board, composed of such and such, with control of the course of study, arrangement of examinations, grant of diplomas, fixture of fees, &c." In the case of a National School of Forestry, supposing such a one unconnected with existing institutions, I think that such a Board, so constituted, with such functions, would be hazardous and unsuitable, and, in connection with any important and adequate existing institution, absolutely impracticable. No governing body or principal could safely surrender or entrust such functions to such a Board. My own opinion, as more concisely given in my own evidence (*Q.* 382, 1887), is that such a Board would be eminently useful as a Board of Consultees; just as (if I may use an illustration from our Cirencester practice), while I am personally responsible at Cirencester, as Principal, for the discharge of most of the said functions, there is a Board of Studies, or Board of Consultees whose opinions and advice are obtained periodically, and the teaching (both practical and scientific) thus kept well abreast of the requirements. I think it is much better in this way to keep responsibility and control in the hands of those who are daily in contact with the work carried on, who, for various reasons, will be certain to have recourse to the best advice. But, on the other hand, I think it would be decidedly advantageous to have for forestry, as the Royal Agricultural College has for practical agriculture and agricultural chemistry, in the case of its diplomas, independent external examiners appointed afresh every year, who might be nominated by such a Board as has been mentioned, and receive their instructions from such a Board, and report to the same. The diplomas would be signed by these Examiners, as well as by the Professors and Principal.

(c.) *The Method and Institution for supplying the Education.*

1885 - - *Q.* 483. 488. 490, 491. 501, 502. 509. 533. 538. 541. 588.

1886 - - *Q.* 9–12. 25. 36, 37. 43–45. 62. 64. 67. 69. 81, 82. 112. 149, 150. 153–158.

In reviewing Colonel Pearson's evidence upon this head some little difficulty arises from the fact that the terms "forestry" and "forestry education" appear, if I mistake not, to be used sometimes in the more comprehensive sense, including the various branches of science already referred to, and sometimes in the less comprehensive sense; and also from the fact that his opinion as to the merits of Cooper's Hill appears to have varied in the intervals between his two examinations.

His views may, however, I think, be thus summarised: that existing institutions should be utilised rather than that an extravagant outlay should be undertaken for an entirely new and independent school; that the place or places to be fixed upon for special supplementary forest teaching should be fairly central, should have an experimental station, and be within reasonable distance of accessible illustrative woods, should be capable of meeting the requirements of intending Colonial as well as Home officials, and should supply an education within reach of all the classes of employés. For these objects he puts aside the Universities; favours the attachment of a forestry course to University College and King's College, London; recommends a Chair of Forestry at Kew for the wants of skilled land agents and their assistants; but especially, and with much emphasis, urges the selection of Cooper's Hill College as the best centre for forestry instruction generally for England, and of Edinburgh (though with less emphasis) for Scotland, Cooper's Hill being at too great a distance. Of Ireland no mention is made. Colonel Pearson admits, or rather states, however, that his knowledge of Cooper's Hill is by hearsay only; and he admits that the course there is expensive, that the instruction given there is chiefly theoretical and for engineers, that it has no access to woods, and that (this was in the evidence of 1885) "it would not meet the requirements of English landed proprietors in the way of supplying them with trained forest officials." But he selects

Cooper's Hill as being central, near the metropolis, and as having a professor of forestry "who could easily give the scientific lectures." And the Royal Agricultural College, Cirencester, having been proposed for his consideration in comparison with Cooper's Hill, he prefers Cooper's Hill as being nearer the metropolis, and so likely to be more attractive to students, and as having a Professor of Forestry whose services could be economically secured; and he further objects to Cirencester "that (*a*) although there are beech woods or forests, there is no fir forest very handy; (*b*) that the education is expensive; and (*c*) that it would be difficult to dovetail the forest instruction with it."

Now it is with these conclusions of Colonel Pearson that I most seriously disagree. I agree with the recommendation to utilise existing institutions, and that the institution or institutions selected should be easily accessible, and have an experimental station and ready access to woods, &c.; but I disagree as follows, and for the reasons that I subjoin:

In the first place, I disagree that the same place should necessarily afford the teaching requisite for both the higher and lower officials. I do not think that, upon the whole, it is even convenient that this should be so. The arrangements necessary for the two classes would be very different; and for the lower classes, forming far the larger number, as many centres as practicable would be convenient, and my opinion is that the large nurseries and plantations in different parts of the country would be the best training schools for these, with the addition of any science they might require from any good school where such science is taught in their vicinity. It would be highly inconvenient, expensive, and embarrassing to bring all the required lower grades from all parts of the country to one centre.

Secondly, I disagree with the recommendation to attach forestry courses to University College or King's College, London. Whether any advantage would accrue from a chair of forestry at Kew, I am very doubtful. It would rather, I think, be either insufficient or a wasteful expenditure, supposing a school of forestry needed and supplied elsewhere. But the objection to University College and King's College, London, is on a par with the objection to the Universities; there would not be sufficient opportunity, if any, for practical illustration. And here I may just remark that for so practical an art as forestry, it is not one branch of study only but all branches that need constant practical illustration, surveying, botany, and geology, *e.g.*, as well as arboriculture and sylviculture.

Thirdly, I entirely and absolutely disagree as to the selection of Cooper's Hill as the best institution for forestry instruction in this country, and the reasons for preferring it to the other college mentioned in this connection, the Royal Agricultural College, Cirencester.

The objections to Cooper's Hill are obvious, and, as stated above, are admitted by Colonel Pearson himself, one of the main ones being that it is professedly an engineering college, and its curriculum, besides being almost entirely theoretical, specially arranged for engineering students. Cirencester, on the contrary, is a college where the teaching is practical as well as theoretical, and its entire curriculum framed and carried out for the objects of agriculture, and the management of estates. This is a vital difference in favour of Cirencester, when we consider that in this country and for its requirements estate agents are the class for which mainly the higher forestry instruction must be designed.

The two points specially alleged in favour of Cooper's Hill are, in my opinion, imaginary, viz., that it is central, and that it has already a professor of forestry who could deliver the scientific lectures. As to the former, in these days of cheap and rapid locomotion, distance is no factor in the problem for the upper class of students. A few shillings extra, a few times a year (possibly saved in lodging expenses in the provinces), is the estimation of this advantage; and, as a fact, Cirencester attracts its students from all parts of England, from the farthest parts of Scotland and Ireland, the Channel Islands, India, and almost every part of the world. As to the latter, Cirencester has a professor of estate management (including the elements of forestry, practical as well as theoretical), and a professor of physiological and systematic botany (including arboriculture), who together probably (though I am not sufficiently acquainted with the offices at Cooper's Hill to speak with certainty) cover as much forestry ground as the professor or professors at Cooper's Hill; while it has also other professors who deal with sciences bearing upon forestry in a manner that no single professor of forestry at Cooper's Hill can possibly do.

Similarly the objections alleged against Cirencester are, I submit, equally imaginary, viz., that it is more or less destitute of conifers; that the education is expensive, and that it would be difficult to dovetail forestry into its curriculum. As to expense, considering the nature of the education and the appliances of Cirencester, it is moderate, and, at all events, no more serious than at Cooper's Hill, if Cooper's Hill be, as Colonel Pearson alleges, expensive also. As to the curriculum, the simple answer is that it must (by the very nature of the case) be much more easy to dovetail forestry into a curriculum of agriculture and estate management than into the engineering curriculum of Cooper's Hill, and, as a matter of fact, we have so dovetailed a considerable portion of it. And, lastly, as to the supposed absence of conifers, it is remarkable that Cirencester is specially fortunate in its proximity to a truly splendid collection of conifers, one of the finest in England, viz., the woods of Mr. Holford at Tetbury, about 10 miles only from the College, where one of the late diploma students is land agent. Cooper's Hill, the evidence states,

has

has no access whatever to woods; Cirencester, at least, has access to and facilities in Lord Bathurst's woods, where there is not only one of the best beech forests in Europe, with oak, ash, and larch interspersed, and other conifers.

Nor, in this connection, ought we to lose sight (as Colonel Pearson's evidence appears to do) of the great importance of the proximity of a good nursery. Within a mile and a-half of the College is the large forest-tree nursery of Jefferies and Son (late Gregory), from which was planted the principal part of Kew Gardens, and where varieties of all forest trees are to be seen, and in all different stages, exhibiting (I am informed by Messrs. Jefferies) a greater variety and better condition than can be found in France, or in the greater part of Scotland. This nursery can be utilised for the College, if desired, to any extent, for experimental, and all other purposes, even to the entire control of a portion.

While, therefore, I am unable to recognise any superior advantage in Cooper's Hill for forestry instruction, whether for Home or the Colonies, or for India, and while I am unable to sustain any of the objections (and they are very few) taken to Cirencester, I venture to point out summarily the advantages which Cirencester appears to have over Cooper's Hill, viz.:—

(1.) Its objects and curriculum in direct association with forestry and land agency;

(2.) The practical character of its teaching;

(3.) Its professorships of estate management and arboriculture, and of all the various sciences required;

(4.) Its chemical and biological laboratories, of great practical value in the study of plant disease, &c.

(5.) Its botanic garden, with specimens of principal timber trees;

(6.) Its museum and illustrative collections;

(7.) Its immediate proximity to excellent timber nursery and extensive woods, affording daily facilities for illustration of all teaching; and

(8.) Its ulterior proximity to one of the best conifer collections, and to the Forest of Dean, for all further illustration.

And if the Royal Agricultural College, or any other college, be so far superior in advantages to Cooper's Hill for the purposes of forestry education and the requirements of landed proprietors in this country, or for the Colonies, it may be that it could also most economically be subsidised for the requirements of Indian forestry also.

22 June 1887. *John B. M'Clellan.*

Appendix, No. 4.

PAPER handed in by the *Chairman*.

LETTER from the Deputy Surveyor of Dean Forest to the Chairman of the Committee.

WHEN I had the honour of being examined, on the 15th instant, before the Select Committee of the House of Commons on Forestry, I had not seen Colonel Pearson's evidence given in 1886, which I much regret, as I should otherwise have probably saved the time of the Committee, and been able to answer some of the questions put to me more readily.

Colonel Pearson appears to be satisfied with the education provided at Cooper's Hill College for Indian foresters, so far as he is aware of it, except as regards the want of a tract of forest for practical training, but for English foresters there is as yet no education provided; and he suggests a scheme for filling up the void in this respect, the chief difficulty in regard to which appears to me to be the cost, viz., about 1,350*l.* a year. This is no great sum in itself, certainly, but it means the creation of an entirely new school or establishment, which could not, I think, be self-supporting, for teaching a profession of a very limited kind; an object which I think, as I stated in my evidence, might be attained equally well by slightly extending the education already provided at existing schools and colleges, and thus obviate the necessity for a prolongation of the period of education.

To add lectures on forestry to the duties of professors of natural history or botany in existing colleges, as, I presume, has been done at Cooper's Hill, would, I think, meet the requirements for gentlemen's agents, and Indian and Colonial foresters, and their higher class assistants, and provide all that is necessary, theoretically; while a short residence, and assistance, with or without pay, in one of the Royal forests, or in such larger woodlands of private proprietors as might be available, would give the practical knowledge required.

If these lectures were given in existing colleges, as an extra subject even, it is more than probable that the sons of landowners and others would attend them, and, for their own sakes, learn sufficient to enable them to overlook the works on their own estates eventually; in my opinion, a most desirable object.

The education of woodreeves, bailiffs, woodmen, and under-foresters might similarly begin at national and board or other elementary schools, where useful handbooks on forestry should be provided; and either taught generally, or as an extra subject, to those who wished to learn foresters' duties; the practical part to be afterwards learnt by labouring in woodlands, or by a short apprenticeship to competent practical woodmen.

Both these means of teaching forestry would be much less expensive, and cost less time, than the establishing of new schools or colleges. One central establishment would, in my opinion, not be sufficient or convenient for both classes of foresters.

I agree, therefore, generally with Colonel Pearson, that "some forest education," more than is available at present, should be promoted in this country. We only differ as to the best, or rather the easiest, way of providing it, as we have clearly indicated in the evidence we have each given.

The question of a representative body to look after the interests of sylviculture and arboriculture is, in my opinion, a good one; but if the teaching of these subjects was entrusted, as I have suggested, to existing colleges and schools, the duty of doing so would devolve, in the latter at least, on Her Majesty's Inspectors of Schools, I presume.

24 June 1887.

James Campbell,
Deputy Surveyor of Dean Forest.

Appendix, No. 5.

PAPER handed in by the *Chairman*.

MEMORANDUM by the Honourable *G. Lascelles*.

To the Chairman of the Committee.

Queen's House, Lyndhurst,
June 1887.

Sir,

IN accordance with the request made by you at my examination before your Committee on the 15th instant, I have now the honour to submit to you a Memorandum embodying my views on the evidence already given before the Committee, and especially as to that of Colonel Pearson, to which you direct my attention.

It would seem that Colonel Pearson's opinions may be briefly summed up under two heads:—

1. That it is very desirable to provide good schools whereby instruction in forestry may be given, (*a*) to young men intending to enter the forest services of India and the Colonies; (*b*) to intending land agents; (*c*) to woodreeves or bailiffs.

2. That the best plan of doing this is the establishment of a school at Cooper's Hill with a small "forest" of 3,000 to 4,000 acres attached to it, to be under the exclusive control of the professors of forestry, and managed by them for purposes of instruction and experimental forestry.

With the first of these two opinions I cordially agree. There is no doubt that not only is this country far behind others in what is properly termed "forestry," or the management of large tracts of forest, but also in ordinary sylviculture, or the best management of plantation, or smaller woodlands.

At the same time, I think that the land agents of the United Kingdom have been rather unfairly criticised by some of the witnesses; because it must be borne in mind that by far the greater proportion of the woods of this country have been planted, or are now managed, not with the primary object of obtaining the best possible return from the timber or produce, but for one of these two purposes, either as ornamental woods for beautifying residential properties, or else as covert for the preservation of game. In the first case, the owner naturally encourages the growth of the more ornamental trees without much regard to the more profitable varieties, nor can he be expected to destroy the beauty of his estate by felling his woods when fully mature, although his agent may be quite able to point out to him that the crop of timber is fully ripe, that it is deteriorating, and will diminish in value, and to advise him with what trees to replant. To fell it and replant the ground will spoil a park perhaps, and it is not, and possibly ought not to be, done. Again, it must be remembered that game and game rents are a very valuable species of property, adding much to the general value of an estate, to which they are adjuncts, and if an owner finds that he can make more by his game than he would by the produce of his woods, which, at the present rate of prices, is very likely to be the case, he would be unwise to sacrifice the more profitable kind of produce to that which paid less well. I think that there are many agents and very many woodreeves who, under these circumstances, manage the woods under their charge very fairly well, and in accordance with the wishes of their owners which, as Dr. Schlich points out (P. 25, 1886) is their first duty.

I do, however, firmly believe that it would be of very great benefit to that large class of young men who are studying to qualify themselves to take the management of land, if they could readily obtain a good course of education in forestry.

Except under private tuition, which is costly, they cannot do so now. But there is another class not mentioned by Colonel Pearson, which it is really in my opinion even

more advisable to educate in forestry to some extent if the English woodlands are to be improved and cultivated on a better system, that is, the owners of the land themselves. Wherever woods are to be seen which are really well-managed, it will be found that the proprietor takes interest in them, and to some extent personally supervises their management. Where the owner pays no attention to the woods they are rarely in good order, because the more material operations of forestry, such as planting waste land, felling mature woods, and replanting, &c., are so very important and so lasting in their effects, that few agents are in a position to undertake them except by the express sanction of the owner, who ought himself to share the responsibility. Where he does not exert himself to do so, the work is usually left undone.

As regards the ordinary woodreeves, no doubt the better education they can get, the better for them, and for the woods under their care.

But there are few estates in England where the forester would find scope for the exercise of a really scientific training in forestry, nor does the salary which is usually attached to such a post reach the figure which a man ought to be able to command who has been through the course of a forestry school on the top of a good education (without which he would waste time in going there). If the agent, or the proprietor, has had some teaching as to the proper rules of forestry, he will have no difficulty in any county in finding a good intelligent practical man who is well able to carry out, and to teach others to carry out, all the ordinary operations of woodland management. The more important operations of planting, selling, marking matured timber, setting out drainage, and so on, should not be planned by him, but by the chief supervisor, but he will be able to carry them out efficiently after they have been explained to him, if he has been trained up under the eye of a man of similar class to himself, and has well learned to use with his own hands each tool used in the woods, from the planting spade to the measuring rule, and is a man of fair education and intelligence. Men of this class are all that is needed on the average English estate; they are not difficult to find. They are not scientific foresters, but they are good woodmen, and the scientific management ought not to be entrusted to them, but should come from the heads over them.

As regards Colonel Pearson's scheme for a school attached to Cooper's Hill, with a forest of 3,000 to 4,000 acres under its control, I have no doubt but that this would be the best mode of educating the class of men who seek employment in the Indian or Colonial forest services. As to this I am not qualified to speak; but probably there is no one whose experience on this head is of more value than that of Colonel Pearson. I am sure, however, that such men need a far higher training in forestry itself, as well as in sylviculture, than ordinary land agents do, whose practice will be limited to one or two thousand acres of planted woods, and who will probably never even see a real forest. No doubt a high training of this kind can well be combined with the education at Cooper's Hill, but I believe that the education is that of an engineer, and is more costly and comprehensive than a land agent needs. Moreover, such a man has, after the usual education at school and college, to qualify himself in such an infinite number of subjects connected with farming, with building, with the law, as connected with the letting and general management of land, &c., that I believe only a few will be found who will be ready, or can spare time to complete their education by going to yet another school to qualify themselves in yet another subject. I think that it is of the first importance that these men should be able to combine their education in forestry, together with other subjects they have to learn, and, therefore (as far as British foresters are concerned), I would suggest that a "chair" of forestry, or, at any rate, a special class should, in addition to the Cooper's Hill School, be established, say, at Downton, where the New Forest is handy for the exemplification of lectures; at Cirencester, within reach of Dean Forest; at Edinburgh, as recommended by Dr. Crumlie Brown, and possibly at other places. To each and all of these I would gladly see a grant in aid of expenses given from the State Exchequer, and possibly it might ensure a good return for the money so laid out if this grant were somewhat in the form of a capitation grant, modelled on the contributions given by the Education Department to public elementary schools, so that the sum given should depend annually on the number of pupils who passed a qualifying examination in this subject. It should be sufficiently liberal to defray the whole of the expenses of the course, provided that a sufficient number of pupils qualified themselves; and as regards the landowners themselves, if the governing bodies of such schools as Eton College, near Windsor Forest, of Marlborough College, close to Savernake Forest, and of similar institutions possessing greater or lesser facilities, could be induced by the action of this Committee to see the vast importance to the nation of the subject of forestry and to establish forestry classes, I believe a great step would be taken towards the making of our woodlands more remunerative by better management. Such classes would be very popular amongst the boys; they would learn a great deal during their last year at school. At least their attention would be drawn to the fact that woods are matters of importance which cannot be left to take care of themselves, but must be properly managed at all stages of their existence, and the classes could be taken up voluntarily, so that those boys whose future lines would perhaps not lie in the direction of rural economy need not take up the course at all. The courses at the agricultural

colleges

colleges should also be planned so that woodreeves or foresters of the higher class might avail themselves of them at a low charge without going through the whole curriculum of the college.

Naturally, in perusing the evidence of various witnesses and the Report of M. Boppe, I have been much attracted by the remarks made upon the New Forest now under my charge. I trust I may be excused if I add to this Memorandum a few words on this subject, because, surely the condition of what is by far the largest and most important of our State forests may well engage a small portion of the attention of a Committee dealing with forestry as a matter of national importance. That this grand national property is, from a forester's point of view, in a most unfortunate condition, is no doubt true, but it is probably not well known how the management of the forest has been fettered and impeded by various Acts of Parliament, passed sometimes under a mistaken view of the Crown's interests, but at other times in favour of the interests of the commoners, which must naturally militate against cultivation of trees in every form. Thus, both M. Boppe and Colonel Pearson remark upon a large area planted with oak alone which has failed, and as they think, for the reason that it was so planted under mistaken management. The facts, however, are that in former years planting was, as now, opposed by private interest in the forest, and therefore only enforced for the essential reason that timber for the use of the Navy must be provided. Oak only might, therefore, be planted, and the whole of each plantation was so planted. Where oak could grow it was the better for the nation, but where it failed, and on so poor a soil, it very frequently did fail; it was the better for the local commoners. Had the managers of that day been at liberty to select the trees most suitable to the soil they were allowed to plant, no doubt they would have done it, and were probably very capable of doing so. The plantations formed under later Acts were planted with various conifers and hardwoods, and in the opinion of most qualified judges who have seen them, were well laid out and well formed.

By the Acts of 1877 and 1878 the rights of commoners were enormously increased at the expense of those of the public, and the matter now stands thus. Everything in the shape of forest management is put a stop to, excepting the mere thinnings and maintaining of the plantations formed under certain Acts of Parliament. Thus there are to be seen by the student of forestry over 40,000 acres of waste land lying idle and worthless, which he will no doubt consider might well be brought under cultivation by planting, but by Clause 5 of the Act of 1877 no planting may be done there. He will see several fine old plantations of oak, planted for purposes of profit, which are not only ripe and mature, but which are going back rapidly, and he will wonder why the crop is not realised and the ground replanted till he is referred to Clause 6 of the same Act, by which he will see that the ground may not be cleared of its crop. Last and worst of all, he will see some 4,500 acres of the most beautiful old woods in the country, most of which are dying back and steadily going to "wreck and ruin." These woods afford the finest possible field for renewal by natural reproduction, and ought no doubt to be most carefully protected; but here again absolutely nothing can be done, and it is for these reasons that M. Boppe and Colonel Pearson are obliged to say that a professor of forestry can teach his pupils nothing in this forest. It seems to me to be so strange an anomaly that a Committee of the House of Commons should be considering the question of expending a large sum of public money in order to establish a school in which the science of forestry may be learned, while at the same time all practice of that science is, as far as possible, interdicted in the chief State possession, where it could be exercised and where it is most urgently needed, that I have ventured to trouble the Committee with these remarks. I trust that it will not be thought that I desire to spoil the natural beauty of the New Forest for the sake of teaching forestry. It is far too beautiful a possession to be sacrificed on any consideration. In the case of the 40,000 acres of waste land, so strong an opinion was expressed by various witnesses before the Committee of the House of Commons of 1875 that the land was of greater value as an open space for a recreation ground than if brought into cultivation under trees, that although I think 40,000 acres a rather large "recreation ground," yet in the face of this feeling on the part of the public, and of the opposition which would be set up by the large body of private individuals who make a profit by cattle breeding upon it, I do not think it would be wise to undertake any more planting operations on a large scale in New Forest, even if the power were granted by Parliament. So, too, with regard to clearing old plantations.

Having regard to the terms of the Act of 1877, passed as the result of a public inquiry, I do not think it would be right to clear away woods, ornamental from a distance or possessing other beauty, even though past maturity, but, I think, some discretion should have been left to those entrusted with the management of these woods with the instruction that the ornamental character of the forest was to be preserved. But as things now stand it must be most clearly understood that this forest is, by the desire of the public, not managed in accordance with the rules of scientific forestry, but more as a vast pleasure ground combined with a cattle farm, and consequently it is useless to expect a good pecuniary return from it.

The case of the old woods is different. These woods were, as there is good evidence to show, originally formed by "encoppicing" large or small areas, and leaving the self-sown trees to spring up naturally, only protected from bite of cattle or deer. They are,

though decaying, a most marvellous example of successful tree cultivation by the mode of "natural reproduction;" it is sad to see them dying out, when all that is required to preserve them for future generations is to imitate the wisdom of those who made them at first, and by simply protecting, by enclosing them and removing dead trees, leave it to nature to perpetuate them. The Act of 1877, while it strictly enjoins that they shall be "preserved," provides, at the same time, that nothing whatever shall be done to them except by planting trees in the open spaces, which cannot be done with real success so long as the woods remain open to cattle.

Woods cannot, however, be preserved by letting them alone. Trees have their span of life, as have human beings. When their time comes they must perish, and if all the seedlings which spring up round about them are destroyed by grazing the land, then the wood itself slowly but very surely will perish. Those who framed the New Forest Act of 1877 desired first of all to conserve these old woods, but their zeal seems to have carried them so far as to defeat the object they had in view, and I cannot but think that, had forestry been a science commonly taught, in the past, as I trust it may be in the future, owing to the result of this inquiry, no such clause could ever have found a place in an Act of Parliament dealing with woodlands.

I trust the Committee will pardon me for laying my views before them at such length. I should not have presumed to do so had I occupied more than a very small portion of their time under examination owing to the late hour at which I was called.

I have, &c.
(signed) *Gerald Lascelles*,
Deputy Surveyor of New Forest, of Alice, Holt, Bere, and Parkhurst Woods, and of the Woolmer Estate.

To Sir Edmund Lechmere, Bart., M.P.,
Chairman of Committee on Forestry,
House of Commons.

Appendix, No. 6.

PAPER handed in by Sir *A. M. Taylor*.

FOREST SERVICE IN INDIA.

1. An examination will be held in June 1887, when not less than 10 probationers, *if so many be found duly qualified*, will be selected to undergo a special training to qualify them for admission to the Forest Service of India.

2. An applicant must be a natural-born British subject, and must be above 17 and under 21 years of age on the 1st of June 1887. He must be unmarried, and, if he marry before leaving this country for India, he will forfeit his appointment.

3. Any person desirous of competing at this Examination must send to the Revenue Department of the India Office, on or before the 1st day of May 1887,—

(*a*) His name and parentage, a certificate, or other satisfactory evidence, of the date of his birth, and a statement of consent from parent or guardian.

(*b*) A statement of the places of education at which he may have been since he was nine years old, accompanied by testimonals of good conduct during the last two years. He must also pay a fee of 4 *l.*, by means of a special stamp, according to instructions which will be communicated to candidates.

4. Applicants will have to appear before a Medical Board * at the India Office, at a date to be hereafter named. Particular stress will be laid upon good vision and hearing, and means will be taken to test physical powers of endurance, so as to ensure none being allowed to compete unless of active habits and sound constitution.

5. The subjects of examination, and the marks assigned thereto, are detailed in the following table:—

	Maximum.	Minimum.
Arithmetic in all its branches - - -	300	100
Compound Addition - - - - - -	50	
Orthography - - - - - -	300	150
Handwriting - - - - - -	200	100
Intelligence - - - - - -	100	—
English Composition - - - - -	200	67
Algebra up to and including Binomial Theorem - - - - - -	300	100
Geometry, including 1st, 2nd, 3rd, 4th, and 6th Books of Euclid - - - - -	300	100
Plane Trigonometry - - - - -	300	100
Elements of Mechanics - - - -	300	75
Elements of Physics † - - - -	300	75
Inorganic Chemistry - - - - -	400	133
Mechanical drawing of Geometrical Figures (limited to the drawing of plane figures) -	400	80
Elements of Botany - - - - -	400	100
French or German { Translation - -	200	67
French or German { Oral - - - -	200	33

† Omitting Electricity and Magnetism.

* With a view to prevent parents and guardians from incurring the inconvenience and expense of preparing candidates who may be physically unfit for the Forest Service, it is suggested that candidates be submitted to examination by the medical adviser of the family, or any other qualified medical practitioner, with regard to the following points;—

1. A weak constitution.
2. Defective vision.
3. Impaired hearing.
4. The existence of any congenital defect.

It is to be understood that this private examination is merely suggested to lessen the chances of disappointment, and that it is by no means intended to take the place of, or to influence in any way, the official examination.

6. The above subjects are compulsory; but in addition thereto, the annexed marks may be obtained in the following optional subjects:—

Translation into French or German, the language being the same as that taken up under the compulsory subjects	100
Freehand drawing	300
Elements of Geology and Mineralogy	300

7. From those competitors who attain the minimum amount of marks, and satisfy the requisite conditions in other respects, the Secretary of State will select those whom he may deem best adapted to the service.

8. The candidates so selected will undergo a course of training extending over two years and two months. During the first 22 months, commencing with the annual session which begins in September 1886, they will prosecute their studies at Cooper's Hill College, where arrangements have been made for instruction in forestry and in the necessary auxiliary sciences. During the last four months the candidates will be instructed, under suitable supervision, in such English or continental forests as may be selected for the purpose. Short tours will also be made during part of the college vacations. The entire expense of the tours and of the practical instruction will be defrayed by the Secretary of State for India in Council.

9. An annual charge of 180 *l.* is made for each student, which must be paid in advance to the Bank of England, in three sums of 60 *l.* per term, the total charge being 360 *l.* Receivable orders, with full directions as to the mode of payment, will be forwarded from the India Office shortly before the fees fall due, to the parents or guardians of the students.

10. A deposit of 5 *l.* is required to be paid by each student on admission to the College, as caution money, to cover charges incurred by him for damage to books, instruments, &c., or any College bills outstanding on leaving the College, when the balance standing at his credit will be repaid. This deposit is to be paid with the fee for the first term, making the total payment on that occasion 65 *l.*

11. The College fees include all charges for tuition, board according to the College tariff, and lodging, with washing, but not for medical attendance. Students are required to provide their own class books and drawing instruments. Drawing paper, drawing boards, and surveying instruments, are provided by the College.

12. Every student will be required to conform to the College rules, to exhibit due diligence in his studies throughout his course, and to give evidence of satisfactory progress, failing which, or in the event of serious personal misconduct, he will not be allowed to remain at the College.

13. The Rules regarding the course of study and other matters may be learnt from the College Prospectus.

14. Every student, before proceeding to India, will be required to furnish to the President satisfactory evidence of his competency in riding.

15. During the course of training, the proficiency of the students will be tested by periodical examinations, and on the termination of their studies there will be a final examination, when, in the event of the results being satisfactory, and provided the Medical Board give a favourable certificate as to health, candidates will be nominated Junior Assistant Conservators in the Forest Department in India, their seniority being regulated by the result of all the above examinations combined.

16. Within a month of his nomination as Junior Assistant, each nominee must sign articles of agreement describing the terms and conditions of his appointment; he must embark for India when required to do so by the Secretary of State, who will provide for the expenses of his passage. Failure to embark at the stated time will lead to forfeiture of appointment.

17. The pay, &c., of the Forest Service may be gathered from the following table; it must, however, be clearly understood that the allowances vary in different Presidencies, and are liable to revision.

	Rs. per Mensem.
Inspectors General of Forests	1,700 to 2,000
Conservators of Forests	1st grade - 1,500 2nd grade - 1,250 3rd grade - 1,000
Deputy Conservators of Forests	1st grade - 900 2nd grade - 800 3rd grade - 650 4th grade - 550
Assistant Conservators of Forests	1st grade - 450 2nd grade - 350 3rd grade - 250

18. The

18. The pay of a Junior Assistant Conservator (250 rupees per mensem) will commence from the date of arrival in India.

19. The young officer will be required to report himself to the Government of India (or to the Government of Bombay or Madras, in case he should be sent to one of these Presidencies) or to such local government as may be specified, and he will then be posted to such place as the service may require.

20. Promotion, leave, and pension will be regulated by the rules for the time being, but an officer will not be eligible for promotion or increase of pay until he has passed an examination in such Native language as the authorities may prescribe.

Appendix, No. 7.

PAPER handed in by Sir *John Lubbock*, a Member of the Committee.

LETTER from Mr. *James Price*, C.E., to the Select Committee of the House of Commons on Forestry.

Engineer's Office, 44, Harcourt-street,
Dublin, 1 August 1887.

Gentlemen,

I BEG to offer some remarks on the subject of afforesting of Ireland, from an intimate experience of the employment and use of native Irish timber as a railway engineer, ranging over 33 years, during which I have been chief engineer of two of the largest railways, embracing the west and part of the north of Ireland; in fact, I am acquainted, practically, with all parts of Ireland.

There are very large districts of rough land in the west of Ireland eminently suited for forests on a large scale, and for nothing else; for instance, a tract of 200,000 acres, north of Clew Bay, in the county of Mayo, valued at 9 *d.* per statute acre, which might be easily enclosed, and requires little drainage, and the timber could be easily transported to ships in the adjoining roadstead; all this rough land would grow larch, sycamore, and alder, &c.

For all general purposes, and especially railway sleepers, no timber from any country surpasses larch; the timber if grown in poor rocky ground is most durable. I have seen larch sleepers in a railway for 22 years taken out sound; it is tough, holds nails or spikes, and from careful experiments its resistance under a sudden cross strain is greater than that of any other timber; it is also the best for boat-building; and it reclaims land by its yearly shedding of fronds better than any other tree. Worthless mountain land, after 30 years of larch-planting, has been raised, from a value of 1 *s.* per acre to 8 *s.* per acre, from the skin of grass left after the trees were cut down. I myself planted near a railway eight acres of land, worth about 4 *d.* per acre, with larch trees, at a cost of 4 *l.* 2 *s.* 6 *d.* per acre; this was 28 years ago; in 12 years more these trees will be worth 2,000 *l.* for railway purposes, sleepers and fencing; the ground was fenced.

I would plant as thickly as 2,400 per acre, and allow one-fourth to grow to an age of from 40 to 50 years; then leave one-sixteenth to grow to 80 or 100 years. As an instance of the value of large larch, I once bought a tree 102 years of age, and paid 7 *l.* 10 *s.* for all except the top. The piece I bought was 30 feet long, three feet diameter at the butt, and two feet diameter at 30 feet. The timber buyer paid 5 *l.* for this tree standing in the wood. I had good value for 7 *l.* 10 *s.*, taking the timber at 1 *s.* 6 *d.* per cubic foot. It was used in lock-gates of a canal or dock.

Sycamore is very valuable when large, so as to turn into rollers for linen and other manufacture. I have known such to be sold at 6 *s.* per cubic foot. It grows rapidly, and generally throughout Ireland on rocky and poor land.

Alder grows in low and swampy land, of which we have a great abundance in Ireland. I am now engineer of Lough Erne Drainage. The low lands now flooded contain 17,000 acres. The margins of the lakes measure about 200 miles, all suitable for the growth of alder, which is a rapid grower, and very useful; all, even the small branches, sell for charcoal-spools, &c.

Birch is also a very useful timber, and grows naturally in the red bog.

Perhaps it is not out of place to include the growth of osiers and other basket-making fallows in forestry, as enormous tracts of Ireland are eminently suited for osier beds;

the great flat clay lands along the margins of the lakes and flooded rivers might be so utilised, and would at once establish an industry in basket-making, and be most profitable.

I would suggest that a forestry department should be established in connection with a drainage department, recommended by the Royal Commission on Irish Public Works, as the same acquaintance with the country would suit both, and a combination would save staff and travelling.

I believe, by judicious planting to the westward, the high winds would be decreased, which would be most beneficial; the floods would be mitigated, and the rivers regulated, as there are now great floods and long periods of low water, often very injurious to the fisheries; and the effect on the climate, by lessening the evaporation, would be very decided, and would raise the summer temperature. With reference to large unsheltered tracts, I believe that if three-fourths of them were planted, the remaining one-fourth would, from shelter, be better able to maintain a population than the whole does now. As to the climate of Ireland, I beg to enclose a pamphlet I wrote many years ago, respecting the views in which I have no reason since to change my opinion, and the highest authorities in Ireland endorse my views on this matter of climate.

I regret I had not an opportunity of being examined before your Committee, but I have now shortly stated the evidence I could have given more in detail.

I have, &c.
(signed) *James Price*, M.I.C.E., M.A.I., &c.

c

P.S.—The profits of large forests after, say, 80 to 100 years, would be a very large item in addition to the exchequer of the country.

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TO THE

REPORT

FROM THE

SELECT COMMITTEE

ON

FORESTRY.

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BOMBAY BRANCH
OF THE
Royal Asiatic Society.
CLASS

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Evidence in support of the conclusion that Government should provide a scheme of planting in Connemara, and that the operations should in the long run be profitable; obstacle to the work being undertaken by the local proprietors, *Flannery* 1536–1545. 1556–1569. 1593–1596. 1609. 1663, 1664. 1688–1694——Advantages of Connemara as a locality in which to provide a branch school of forestry, *ib.* 1545, 1546. 1570–1577. 1597–1601. 1611. 1665–1668——Cheapness with which fences or bog ditches could be made around the plantations, *ib.* 1547–1549.

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Special facilities for osier cultivation in Connemara; local benefits thereby, *Flannery* 1624–1629——Inappreciable extent to which tenants would be deprived of pasturage or would require compensation if land were taken for planting, *ib.* 1630. 1638–1642. 1670–1675. 1680–1687——Economy in planting in Connemara being undertaken directly by Government instead of by the landlords, *ib.* 1688–1694.

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Opinion that land agents could not not afford the time or expense necessary for the course at Cooper's Hill, *Clutton* 1922, 1923—— Question considered whether the forestry course at Cooper's Hill might not be so re-arranged as to be utilised by land agents at home as well as by students for the Indian forest service, *ib.* 1937–1952.

Great value of instruction in forestry at Cooper's Hill and at existing agricultural colleges; suggestions in detail on this subject, *Sir J. D. Hooker* 2185 *et seq.*——Concurrence generally in Colonel Pearson's views as to the mode of utilising the Cooper's Hill establishment for the scientific instruction in forestry of land agents and others, *ib.* 2188–2190. 2197. *et seq.*

Explanation that the forest branch of the College has been established specially for the Indian forest service, there being no students who intend to become land agents in England, *Sir A. Taylor* 2414-2416. 2442. 2463, 2464—— Facility of arranging for the attendance of the land agent class, by dispensing in their case with the preliminary examination on entrance, and by their coming as out-students to attend lectures at a moderate charge, *ib.* 2416–2429——Payment of 180 *l.* a year by the students, the fees being now about equal to the expenses, *ib.* 2420. 2451–2453.

Information respecting the forestry instruction given in the College, the staff employed and the accommodation; increased staff and accommodation necessary if there were a special course of lectures and instruction for a land agent class, *Sir A. Taylor* 2423-2450. 2454-2457. 2466–2478——Unfitness of the present course for men of the wood-reeve class; less scientific instruction required in their case, *ib.* 2431, 2432. 2475–2478 —— Statement to the effect that Cooper's Hill is only suitable for men wanting to learn forestry thoroughly, a modified and less expensive course and a much shorter term being necessary for men about to become land agents or head foresters, *ib.* 2443–2449. 2454. 2463–2478.

Explanation that the educational course and the arrangements generally at Cooper's Hill are under a board of visitors, of which witness is a chairman; belief on his part that the board would give favourable consideration to any proposal for utilising the College in connection with forestry in this country, *Sir R. Temple* 2479.

Memorandum by Mr. M'Clellan on Colonel Pearson's evidence; conclusions of the former as to the advantages of the Royal Agricultural College over Cooper's Hill for forestry instruction, *App.* 129–133.

Paper submitted by Sir A. M. Taylor, showing the conditions of examination and of entrance to the College in order to undergo a special training for forest service in India, *App.* 139–141.

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Corsican Pine. Favourable opinion as regards the Corsican pine, except that it is a very shy grower, *M'Corquodale* 1407—— Rapid growth of the Corsican pine in England, though the quality of the wood is not so good as that grown in Corsica, *Sir J. D. Hooker* 2221, 2222.

Cost of Planting. Estimate of about 2 *l.* an acre as the cost for which large areas in Scotland might be planted and fenced, *Macgregor* 1028–1031. 1093–1102—— Reduced cost when planting is done on a large scale; enhanced cost if fenced against deer, *ib.* 1109–1115.

Much less cost of planting large than small enclosures, *Thompson* 1154. 1215—— Particulars of cost of planting and fencing an area of nearly 900 acres, as carried out by witness at Strathspey; aggregate of 1,304 *l.*, or about 30 *s.* per acre, *ib.* 1154. 1212. 1297–1304.

See also *Profitable Results* (*Planting*).

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Curriculum (*Instruction in Forestry*). Expediency of forestry being taught, together with kindred subjects, instead of there being a separate forestry school, *Wrightson* 232. 239. 252 *et seq.*; *Elliot* 510, 511. 516; *Earl Bathurst* 547–554. 569–573——Want of a period of about two years for the curriculum advocated by witness, *Wrightson* 348, 349 ——Suggestions as to the branches of science to be included in the curriculum for forestry students, and as to the length of the course, *Sir J. D. Hooker* 2211–2219. 2233–2237.

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See also *Agriculture. Botany. Entomology. Practical Instruction. Schools of Forestry.*

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D.

Dean Forest. Advantage if Dean Forest were available for practical instruction in forestry in connection with Cirencester College, *Elliot* 488-491.

Area of from 15,000 to 16,000 acres of woodland comprised in Dean Forest and the High Meadow Estate; very much larger area in former times, *Sir J. Campbell* 621. 675, 676——Cultivation chiefly of oak for the Navy, the plantations being mostly from twenty-five to seventy years old, though some are about 130 years old, *ib.* 622-628. 658. 717, 718——Information as to the staff under witness, and their qualifications; practical training of the woodmen from their youth in the forest, *ib.* 629-635. 656.

Suggestions as to the extent to which the Forest of Dean might be utilised in connection with the forestry branch at Cirencester College, as well as with the practical training of young men as woodmen, *Sir J. Campbell* 643-646. 651-657. 683-691. 711-716. 738-745——Bad financial results from Dean Forest in the last two or three years; injurious effect of foreign competition, *ib.* 661-663. 677-681. 697, 698.

Disafforestation. Disafforestation of some 10,000 acres of woods at the instance of witness, which he would now like to see restored, *Chilton* 2029, 2030.

Diseases of Trees. Expediency of better knowledge in forests as to the diseases of trees, and the effect produced by insects, *Macgregor* 880, 881. 945-951. 1016-1019. 1071.

Douglas Pine. Special value attached to the Douglas fir; very high and exposed altitudes at which it thrives, *Barron* 48-50. 52. 54-59——Further statement as to the merits of the Douglas pine and the expediency of its extensive introduction into this country, *ib.* 177-181——Advantage of planting the Abies Douglasii in masses rather than singly, *Earl of Ducie* 460-462——Value of the Douglas pine if planted in suitable land, *Macgregor* 1010, 1011.

Very satisfactory results in the case of plantations of the Douglas pine on Lord Mansfield's property; rapid growth of this tree, whilst it is exceptionally free from insects, *M'Corquodale* 1367-1370. 1374-1377. 1393-1395——Advocacy of the planting of the Douglas pine in this country as not being liable to disease and being of excellent quality; very large dimensions attained by this tree in the States, *Powell* 2059, 2060. 2083-2087. 2142-2145. 2173-2177——Witness has great faith in this pine, which he looks upon as one of the trees of the future; prospect of its being grown at a profit, *ib.* 2059. 2142-2145. 2177.

Conclusion that the Douglas pine grown in this country will never be equal to that grown in Vancouver, *Sir J. D. Hooker* 2223, 2224——Strong approval of the Douglas pine; very promising results from a large number planted by witness on his property in Wicklow, *Viscount Powerscourt* 2285. 2293-2297.

DOWNTON AGRICULTURAL COLLEGE:

Enumeration of the chief subjects taught to the students at Downton College; instruction given not only in the science and principles of agriculture, but in its practice, *Wrightson* 220. 256, 257. 333, 334——Different pursuits in life for which students are sent to Downton, the average number of students being about fifty, some of whom are in training for colonial careers, some for land agency work at home, whilst others are the sons of gentlemen landowners, *ib.* 221-223. 309-315——Total of about 600 acres attached to the College, there being a botanical garden and a belt of forest trees about 500 yards in length, for special instruction in foresty, *ib.* 224-226.

Details as to the extent to which forestry is now taught in the College and as to the character of the instruction, there being a combination of practical and scientific teaching, *Wrightson* 227 *et seq.*——Explanation that forestry is part of the curriculum of the College but has not up to the present time been a leading subject; staff provided for this branch, *ib.* 227-236. 256-263.

Natural facilities at Downton for instruction in forestry, on account of the vicinity of the New Forest and of private woods; examination hereon upon the question of some 200 acres of the Forest being made available for experiments and for practical instruction, *Wrightson* 237, 238. 271-275. 294-304. 329-342——Means of rendering Downton capable of supplying much fuller instruction in forestry; great importance attached to facilities for experiments and to practical teaching, *ib.* 243-246. 252 *et seq.*——Consideration of the question of practical foresters being trained at Downton, as well as land agents and others; difficulty as to fees, *ib.* 264-276. 282-293. 305-315.

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Suggestions on the subject of students in forestry being prepared at Downton or Cirencester for examination by a board of examiners in London; way in which such board should be constituted, *Wrightson* 276-281. 316, 317. 328. 342-346——Heavy outlay necessary in order to procure 200 acres of land near Downton, in the event of its not being feasible to obtain a grant of portion of the New Forest, *ib.* 318-322——Necessarily high fees charged, *ib.* 338——Instances of the practical character of some of the experiments, *ib.* 339.

Drainage. Enhanced value of the adjoining unplanted land as regards drainage if portions were planted, *Flannery* 1491. 1589, 1590. 1620-1623.

Ducie, Earl of. (Analysis of his Evidence.)—Witness has been Chairman for fifteen years of the Royal Agricultural College at Cirencester; considerable importance attached by him to the teaching of forestry at the College, 438-444——Expediency of forestry being taught in conjunction with the kindred sciences, and of land agents being instructed in it, 444. 455, 456——Highly qualified land agents who have passed through Cirencester; various classes in life whence they come to the College, 445-447. 457-459.

Facilities at Cirencester for both out-students and in-students; relative fees for the two classes, 447-450. 458, 459——Difficulty on the score of expense in training woodreeves or foresters at the College; short course desirable for the instruction of this class, 450. 463, 464. 466——Probability that woodland in the west of England may be profitably cultivated with larch and other timber. 451-454. 460-462——Advantage of the Abies Douglasii in masses rather than singly, 460-462——Necessity of Government aid if a Forest School be established, 465——Natural facilities at Cirencester for the study of arboriculture, 467.

Dundas, Robert. (Analysis of his Evidence.)—Large interests of witness as a landowner and colliery proprietor in Scotland; he has about 800 acres of woods, 1411-1413. 1430-1432.

Great obstacle to the growing of timber for profit since the abolition of the duty on foreign timber many years ago and the consequent reduction in price, 1415——Further difficulty through the great increase going on in the substitution of metal for wood, 1415. 1466——Cheaper production in Norway than in Great Britain owing to the much lower wages in the former country, 1415.

Small demand for home-grown as compared with foreign timber for building purposes since the extended use of improved machinery for conversion of the latter; illustration in witness' case, 1415——Disadvantages of home-grown timber as compared with German timber, the latter being much straighter, cleaner, and better ripened, 1415. 1419. 1452.

Particulars as to the present prices of larch, Scotch fir, &c., witness submitting that at these prices it is not possible to grow wood in this country at a profit, 1415. 1421-1423. 1427-1433. 1447, 1448. 1466——Information as to the sale of timber by witness, the prices obtained, the rent or value of the land, &c.; unsatisfactory results as regards profit, 1415-1434. 1447-1452.

Ground for the conclusion that the want of a separate school of forestry in Scotland has been much exaggerated, and that it would be much better to provide the required scientific instruction in combination with the existing staff at Edinburgh and Aberdeen Universities, 1435-1446. 1453-1465——Valuable operation of the system of bursaries, or exhibition scholarships, at Edinburgh University; suggestion that by this means scientific forestry education can best be provided, subsequently to practical training on the woodlands, 1435-1444. 1453-1465.

Dyer, Thistleton. Concurrence of views generally between Mr. Thistleton Dyer and witness on the subject of forestry instruction and the facilities to be given thereto, *Sir J. D. Hooker* 2225.

E.

Edinburgh University. Advantage if there were a Chair of Forestry attached to the Professorship of Agriculture, *M'Corquodale* 1357-1361——Valuable operation of the system of bursaries, or exhibition scholarships at Edinburgh University; suggestion that by this means scientific forestry education can best be provided subsequently to practical training in the woodlands, *Dundas* 1435-1444. 1453-1465.

Elliot, Thomas John, M.R.A.C., F.H.A.S. (Analysis of his Evidence.)—Witness is Professor of Estate Management and Forestry at Cirencester College; he is also a Fellow of the Royal Highland Agricultural Society of Scotland, 468-471.

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Entomology. Advantage of instruction of foresters in entomology, *Macgregor* 945-949.

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Examinations in Forestry. Suggestion that one of the functions of the proposed forestry board would be to make provision for examinations, *Rep.* v——Several subjects to be included in the examinations, *ib.* vi——Suggestion that certain inducements might be offered to the agricultural colleges and the Surveyors' Institution to send students for examination, *ib.*

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Experimental Planting. Belief as to the self-supporting character of an area of 200 acres utilised for the planting of trees under different systems; question hereon as to the institution in charge being guaranteed against loss, *Wrightson* 340-342.

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F.

Felling of Trees. Want of more skilled workmen for felling timber, whilst very few agents know anything of this subject, *Britton* 837-839.

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Flannery, The Rev. T. E. F. (Analysis of his Evidence.)—Witness, who is parish priest of Carna, county Galway, is well acquainted with Connemara, this district and large portion of the west of Ireland being of a mountainous character, 1467-1472.

Great deficiency of timber in Connemara, and of drift wood, for the wants of the people, 1473-1475. 1495-1498. 1506. 1605. 1610——Practice of planting for shelter near the houses of large proprietors, there being very little timber except on the shores of Lough Corrib, 1476-1482——Several respects in which important benefits would result from extensive planting in Connemara, whilst there are extensive areas available, and there is evidence that woods existed in former times, 1483 *et seq.*

Facility as regards conveyance to market if a railway were made in Connemara, 1490-1492. 1567-1569——Great value of planting as a means of shelter; improved climate thereby, 1493. 1566——Enhanced value of the unplanted land as regards drainage if portions were planted, 1491. 1589, 1590. 1620-1623——Want of timber for boats; also of osiers for lobster pots, 1495-1498. 1550. 1582-1588. 1624-1629. 1656-1659——Increased attraction to tourists if planting were carried out on the mountains, 1499-1501.

Employment to be given at factories if sufficient timber were procurable in the district, 1502-1505——Facility of obtaining 30,000 or 40,000 acres of land for planting at a rent of about 6 *d.* an acre; entire absence of difficulty on the part either of landlords or tenants, the latter being benefited in various ways, 1507-1516. 1551. 1561. 1578-1581. 1612-1624. 1630. 1670-1675. 1680-1687——Cheapness of local labour for planting, some skilled foresters being required, 1517-1519. 1595.

Various kinds of trees which grow very well in Connemara, such as the Scotch fir, the larch, the Austrian pine, and others, 1520-1524. 1552-1555. 1591, 1592. 1633-1637. 1647-1652. 1660, 1661——Characteristics of the bog land in Connemara, which make it suitable for planting, 1525-1527. 1615——Large areas of land in different parts of Ireland, as well as in Connemara, suitable for planting, but not obtainable so cheaply, 1528-1535. 1546.

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Conclusion as to trees thriving well in Connemara, when planted at some distance from the sea, 1556. 1599-1603. 1608——Very moderate cost for which an acre of bog in Connemara could be planted, 1593-1595.

Facilities for transporting the timber in the absence of a railway; large demand, however, for local wants, 1604, 1605. 1607. 1610. 1631, 1632. 1653-1659. 1662——Statement as to the chief proprietor in Connemara being non-resident, and as to former owners not taking an interest in planting, 1609. 1676-1679——Special facilities for osier cultivation in Connemara; local benefits thereby, 1624-1629.

Inappreciable extent to which tenants would be deprived of pasturage or would require compensation if land were taken for planting, 1630. 1638-1642. 1670-1675. 1680-1687——Economy in planting in Connemara being undertaken directly by Government, instead of by the landlords, 1688-1694.

Foreign Competition. Conclusion that railway sleepers and other timber now largely imported might be profitably produced at home if there were a better system of instruction in forestry, *Barron* 70-75. 93, 94. 129-135. 161-163——Very little, if any, prospect for the home timber trade, or for profitable planting and cultivation, in view of the extremely low prices of imported timber from Norway, America and elsewhere; particulars hereon, *Britton* 761 *et seq.*——Consideration of the relative quality of British and foreign timber and the relative demand for each; preference for the latter mainly on account of the low price, *Britton* 808-826——Probability of a decrease of foreign competition, and of better prices for home-grown timber, *Thomson* 1223, 1224. 1256-1258.

Ruination of the home timber trade by foreign competition, *M'Corquodale* 1362——Grounds for the opinion that the present low prices will not continue, and that foreign competition will become less severe, *Gilchrist* 1762-1764. 1857-1861. 1867-1869——Probability that the imports of colonial and other foreign timber will in course of years diminish in quantity, and increase in price; national importance on this score of encouraging forestry instruction and increased planting at home, *Clutton* 1935, 1936. 1955-1966. 2022-2024. 2039.

Prospect that some considerable proportion of the timber now imported, to the value of 16,000,000 *l.* annually, may, under more skilful management, be raised at home, *Rep.* iii, iv.

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Information as to witness' staff of woodmen and workmen, and as to the qualifications of the former, *Earl Bathurst* 548. 557, 558. 565-567. 598-605——Difficulty as to the teaching of woodmen or under woodmen in forestry schools, *ib.* 606-612——Value of practical training under experienced foresters, rather than in a college in the case of ordinary woodmen, *Sir J. Campbell* 641——Difficulty as to woodmen availing themselves of a scientific school, *Hon. G. Lascelles* 857.

Insufficient encouragement given by proprietors in Scotland to the instruction of foresters; advantage if the latter were certificated as to competency, *Macgregor* 933-939. 963-965——Difficulty as to the payment of fees by working foresters, for whom there should be free classes, *ib.* 967, 968——Further considerations as to the want of special instruction for foresters or woodmen in Scotland, and as to the means of supplying this want; advantage of some tuition on the subject in the elementary schools, *ib.* 1020-1027. 1045 1056.

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Decided advantage if foresters in Scotland could have some scientific instruction at a school of forestry, in addition to practical training in the woods; difficulty on the score of expense and time, *Thomson* 1155-1160. 1166-1171. 1186-1190. 1205-1209. 1216. 1267-1280. 1310-1318——Small expense necessary as regards staff, *ib.* 1189——Large number of young men trained under witness; competency of these in course of time to take charge of woodlands, *ib.* 1157-1159. 1204-1211. 1219-1221. 1239-1241. 1259-1266. 1310. 1319-1321——Advantage of an extended system of local examinations for foresters, in the absence of a school of forestry, as by means of the Highland Agricultura Society, *ib.* 1172-1179. 1281-1287.

Considerable number of young men trained under witness on Lord Mansfield's estate as assistant foresters; competency of these after a few years to take the charge of woodlands, *M'Corquodale* 1348-1353——Want of special instruction in forestry for land agents, but not for foresters; the latter class should be instructed by the former or should be trained where they are at work without going to any forestry school, *Clutton* 1919-1922. 1949-1952. 1980-1982. 1997-1999. 2007——Encouragement desirable to be given to the instruction and training of students of a lower grade who may prove themselves competent to become land agents; consideration of the difficulty on the score of expense, *Sir J. D. Hooker* 2198-2200. 2212. 2215-2219. 2233-2237.

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G.

Game. Very limited extent to which the bad condition of plantations is due to the preservation of game, *Barron* 149-154——Disadvantage as regards forestry instruction through the preservation of game in woodlands, *Elliot* 505. 506. 524-526——Considerable injury from game in some woodlands in Scotland, *Macgregor* 980-982——Great injury to plantations in Perthshire from game, *M'Corquodale* 1371-1373.

Germany. Disadvantages of home-grown timber as compared with German timber, the latter being much straighter, cleaner, and better ripened, *Dundas* 1415. 1419. 1452——Very strict legislation in Germany for the protection of woodlands, *Powell* 2179——Similar lines upon which the various forestry schools in Germany are conducted, though the rules of management vary very much in different schools, *Brown* 2273-2276.

Gilchrist, Andrew. (Analysis of his Evidence.)—Witness has been head forester to Lord Powerscourt for nearly ten years, having previously had many years' experience of woodlands in Scotland, 1695-1702.

Fairly good management of the larger woodlands in the eastern districts of Ireland, this not applying to the smaller woods, where skilled foresters are not in charge, 1702, 1703——Substantial enhancement of the value of adjacent property by the shelter afforded by plantations, the soil and climate being also much improved, 1704-1709——Opinion that tenants in Ireland might plant very profitably, but that landlords are not likely to do so since the late Land Act, 1710-1712. 1770-1774. 1791, 1792. 1876-1878.

Description of the planting operations at Powerscourt, as carried out under witness, the practice as to thinning, disposal of the timber, &c.; conclusion as to the profitable results attained, 1713-1736. 1758 *et seq.*——Disadvantage to home-grown Irish timber through the preferential railway rates given to foreign timber, 1717, 1718.

Calculations in detail respecting the original cost of planting per acre on the Powerscourt estate, the original value of the land, the value as woodland, and the annual amounts realised; profits obtained from larch more especially, 1719-1736. 1753-1761. 1815-1821——Doubt as to it being profitable to grow hard wood, such as ash and oak, in large quantities, 1733-1736. 1795. 1864.

Importance attached to the establishment of several local schools of forestry throughout the three kingdoms, three central schools being quite inadequate, and involving too much time and expense; suggestions for utilising Board schools and night schools for the purpose, 1737-1752. 1775-1790. 1829-1130. 1879-1893. 1900-1908——Conclusion as to the insufficiency of one central school for Scotland, and as to the advantage of special forestry instruction in the Board schools, 1738-1744. 1775-1782——Advantage if the question of forestry instruction were taken up by the Royal Dublin Society; still greater advantage if Government took the matter up, 1745-1752.

Grounds for the opinion that the present low prices will not continue, and that foreign competition will become less severe, 1762-1764. 1857-1861. 1867-1869——Decreased demand for timber through the increased use of iron in lieu of wood, 1765-1767——Good quality of Irish larch, the soil being suitable for its profitable cultivation, as well as for that of Scotch fir, 1768, 1769. 1793, 1794. 1837-1863.

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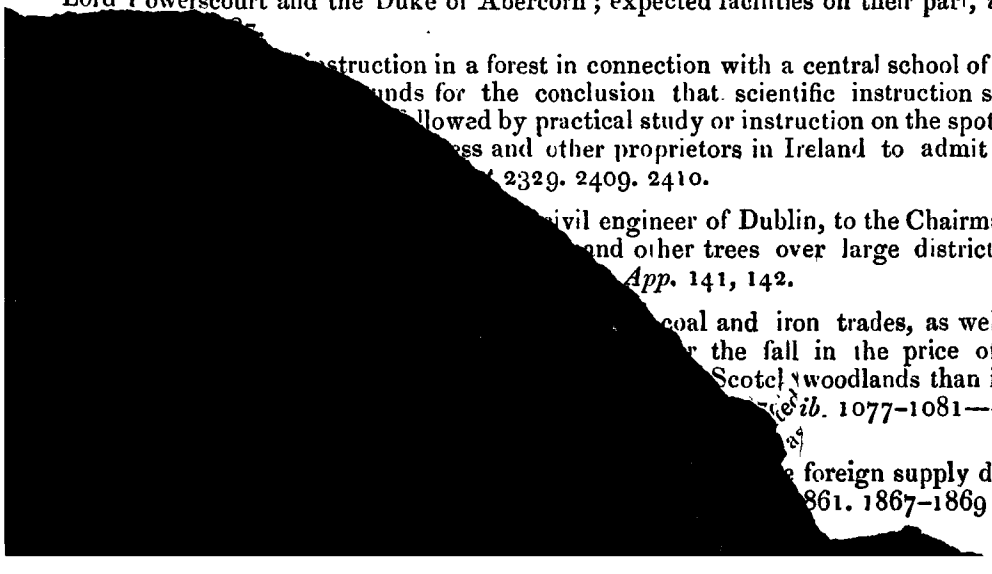

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